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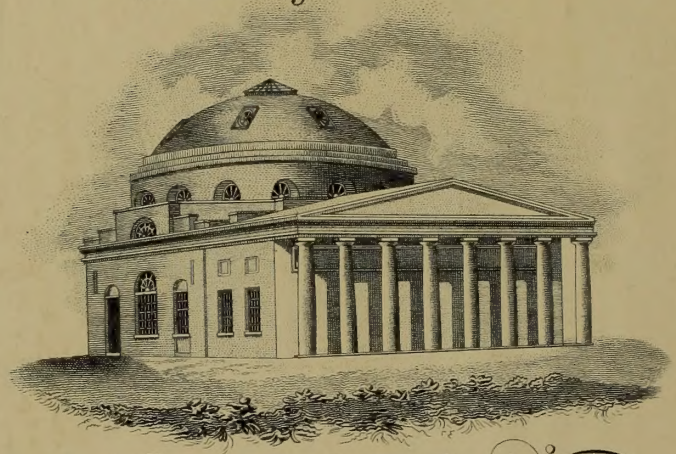

University of Maryland

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1812-1857. The individual dissertations were bound together during the 1990's. The original tables of contents for the bound volumes contained errors in authors, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

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UNIVERSITY OF MARYLAND

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Shelburn, Silas E.	Diphtheritic Dysentery	
Derieux J. L.	Syphilis	
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Sikes, Ginnado T.	Death	(no title page)

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Author	Title	Notes
Kearney, William A.	Amenorrhoea and Menorrhagia	(no title page; legal paper)

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UNIVERSITY OF MARYLAND

THESES

1883 (d)

Whitaker, ~~H.~~ Henry H.	Intermittent Fever	24p.
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Free, ~~G.~~ George B. M.	Whiskey	24p.
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Intermittent Fever

Henry H. Whitaker.

March. 1883

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Intermittent Fever.

Definition.— A disorder characterized by febrile paroxysms at stated intervals, and by absence of fever between the paroxysms, (commonly called Chills and Fever). Intermittents have been divided by modern writers into several types or varieties. The chief types are those founded upon the length of the interval between the paroxysms, viz: Quotidian in which there is a daily paroxysm with an interval of twenty-four hours, Tertian, where a paroxysm occurs every other day, the interval being forty-eight hours, Quartan a paroxysm taking place every third day, the interval being seventy-two hours.

There are the most common types, but we some times meet with Sextan, Octan, Double quotidian and Double tertian. The quotidian, form is most frequently met with in children and the tertian in adults. The paroxysm appears after a longer or shorter interval from the time when the morbid impression was made upon the system. During this incubating stage, symptoms of disorder may be more or less manifest, but they are often very slight or hardly discoverable, until shortly before the paroxysm, which may occur suddenly or unexpectedly, with the usual invading symptoms. The

fully developed paroxysm commences with a creeping chilliness along the spine, with languor or a sense of fatigue, paleness and a slight collapse of countenance, lividity of the nails, and lips (more marked in children), and a feeling of universal coldness. The temperature of the surface is reduced, the skin is dry and rough, shiverings or tremblings, or rigors occur and the teeth chatter, sighing, yawning and stretching, with difficult or forced respiration, occasionally cough and nausea are also present. The patient complains of a constrictive pain in the head and temples.

of aching of the back and loins, and of dryness and a disagreeable taste in the mouth. The tongue is white, or loaded, appetite lost - the urine diminished, sometimes dark - and the bowels are generally constipated. Sickness and (bilious) vomiting, suppression, the urine constricted, small, rare, and often accelerated, and the mental powers are weakened or overpowered.

Such is the cold stage.

<u>The Hot Stage</u>:- the transition to this stage may be sudden, but is generally gradual, being indicated by alternate flushing and chilliness, or by parts of the body becoming

warm, when it becomes fully developed the skin feels burningly hot and dry is red and turgid and sometimes a patchy rash appears. The face is flushed and the eyes are injected and sparkling. There is intense thirst, with dryness and heat of mouth, total anorexia, a white tongue, and sometimes nausea or vomiting. The heart and great arteries throb, and the pulse is generally strong and full. Respiration is more quiet than in the first stage. Headache is always present, with a sense of throbbing, and sometimes more or less delirium occurs, which may be very violent, or convulsions may set in.

This stage lasts usually from three to eight hours the extremes being from one to eighteen hours. A real increase of heat of the surface is found by the thermometer; sometimes reaching 105° to 108°, while in the cold stage, the sense of coldness does not prove a low temperature of the body, which the thermometer sometimes shows to be very much above normal.

Sweating Stage.— The respiration breaks out over the forehead and breast, increases rapidly, extends over the whole body, and soon becomes profuse. All the symptoms now subside quickly, the skin is hot and soft, the skin cool. The urine now

is passed freely, and deposits a brick-dust-like sediment. There is no definite length of time to be assigned to the sweating stage. In the three stages now and then one or two may be wanting. The bowels now being more readily acted upon and the mind more composed, a sense of exhaustion only now remains, and the patient often falls asleep - and the paroxysm is at an end. This the sweating stage, corresponds with the periods of crisis and decline. The whole duration of the fit varies from two to sixteen hours, the common length of it being about six or seven. The paroxysm having terminated more or less

completely, in health, some degree of lassitude and debility usually remains, is renewed after an interval, the recurrence of which constitutes the type of disease.

Of the double types, - the tertian is the most common and differs from the quotidian only in having, on alternate days, fits corresponding in severity, character and duration. Agues are most prevalent in the spring and autumn, tertians and quotidians in spring, and in Adults of a bilious temperament.

Quotidians in autumn - in very young persons, in females

and in the lymphatic temperament, Tertians are the mildest and shortest in duration and often sometimes disappear themselves. Quartans are removed with the greatest difficulty, They sometimes continue from autumn till the following spring. The longer the apyrexial interval, the more complete is the restoration to health. but during this period or intermission the patient often complains of pain in the head, of a sense of cold, and weakness, want of appetite &c.
When the ague continues some time, although it may not change its

type or form as it is then prone to do, especially in the worse climates the patient becomes weakened, loses flesh, has a sallow hue, and experiences obstructions or enlargement of the spleen, liver, mesenteric glands &c, with a morbid state of the secretions and excretions, The conversion of one type of ague into another often occurs - tertians and quartans changing to quotidians, or to double or triple tertians and quartans, especially when they become aggravated - and quotidians into tertians when they are somewhat ameliorated. Agues, particular

Quotidians, may also be converted into remittents, or even into the continued type, by the constant operation of the exciting causes, or by other powerful determining influences but they often assume a complicated, or an irregular form in the course of transition.

<u>Aetiology</u>,— Upon the origin of Malarial fevers, the following facts seem to be established. They are always strictly localized in prevalence. An average summer heat of at least 80° for two months is necessary to their development. Their violence and mortality are greatest, in tropical and sub-tropical climates, They prevail least where the

surface of the earth is rocky, and most near marshes shallow lakes and slow streams. The vicinity of the sea is free from them, unless marshes lie near it. Some observations and experiments, tending to show that minute cryptogamic plants of the family of the Palmellae, abound over the surface of marshes, can generate intermittent fever, when transported to localities otherwise free from it. Some authorities assert the discovery, in the soil, water and air in malarious localities of a peculiar microscopic fungus, capable of producing intermittent fever in animals by inoculations; to which they give the name Bacillus Malariae. The

general evidence in favor of vegetable decomposition being the remote cause is, that all countries are for the most part free from paludal diseases while the crops are growing, and only unhealthy after the harvest, when large quantities of vegetable matters are left on the ground at the time the rain begins to fall. Marshes are in general healthy till the summer sun or other causes, has diminished their waters, and bared a greater or less portion of their bed, The part thus exposed almost always contains a large portion of vegetable growth of a fungoid nature which may be or may convey the poison which

gives origin to this class of diseases. The miasmal poison on account of its low specific gravity keeps at near the surface of the earth. Therefore persons sleeping in the upper story of a house may be more apt to escape the influence of the poison, than those sleeping on a level with the ground.

Morbid Anatomy,- The spleen presents the most notable changes, being at an early period much enlarged, from congestion, soft textured, and sometimes friable. After awhile it becomes permanently hypertrophied and firm constituting the so called ague cake. The liver is also congested and soft,

and ultimately hypertrophied.
The changes in the blood: the white corpuscles are much increased in numbers, but the most important change in the composition of the blood is the formation of pigment from the haemoglobin, the haematin is set free, and is found in all the principal organs associated with the vessel-walls, and rarely collected in masses, and forming capillary emboliems.
Complications and Sequelæ. Persons suffering under the influence of malaria are very liable to pneumonia, which comes on rapidly after

involves both lungs and is of a very dangerous character. This is particularly observed in patients returning from hot malarial climates to cold climates. The blood is also prone to undergo acute changes of a serious character, ending in marked anaemia with excessive formation of white corpuscles, this condition being accompanied with dropsy. Various forms of neuralgia are apt to follow ague.

Diagnosis.— We shall seldom ever be certain, unless to be malarial, because very many acute disorders begin with a cold stage.

A case of intermittent so complete at all points, could hardly be confounded with any other malady. It may be mistaken for typhoid in which there are chills, fever and sweats, with an apathetic interval. It may be also mistaken for septic fever, which there is usually a known cause for the symptoms. The septic febrile symptoms, the patient is weak, and emaciated, the paroxysms irregular in time and duration; there is a bright rosacea flush upon the cheek, and headache is usually absent. It differs, however from typhoid in its origin and in the clinical course.

Intermittent is due to a superficial miasm — pyaemia to wounds, suppuration of veins, etc; intermittent is regular in its course — pyaemia is very irregular, no defined intervals recurring; intermittent is a benign affection, promptly cured by quinia — pyaemia is a fatal disease, over which quinia has no influence. Masked intermittents are differentiated from the local maladies whose form they assume, by the fact that Malaria is abundant, that these diseases are distinctly periodical, and that they yield to the remedies for Malarial.

The diagnosis of pernicious fever is very difficult.
Prognosis.— Left to itself, intermittent will sometimes get well as early as the seventh, eighth or ninth paroxysm; more often it will last ten weeks; sometimes for as many or more months. When under treatment, it is almost always possible to break the chills by quinicization or cinchonization; but they frequently return; especially at the end of one, two or three weeks. It is a good sign for the paroxysm to occur later and later in the day, and to become shorter and shorter.
Tertian ague is generally the most

readily cured; quartan the most intractable, though comparatively uncommon. Death in modern times, since the discovery of the properties of Cinchona bark, almost never happens from the ordinary type of intermittent; the pernicious form is very dangerous. Those who have suffered from this disease are liable to future attacks, apart from any exposure to Malarial influences.

Treatment.- During paroxysm in the cold stage the patient should remain in bed, being well covered with blankets, some form of heat being applied externally, and hot drinks administered,

where there is much depression, diffusible stimulants are required, and a little opium may be given to relieve great restlessness. Persistent vomiting is best checked by giving an emetic, or an effervescent one, or small dose of calomel. In the hot stage the skin should be sponged freely, and cooling effervescent or saline drinks be given. During the sweating stage nothing is necessary but to keep the patient covered, so as to prevent a chill.

During the Intervals.— The great remedy at this time is quinia and it rarely fails to bring about a speedy cure. There is much difference of opinion as to the period of administration,

and dose of quinia in the treatment of intermittent fever; but experience teaches us that a mercurial or saline cathartic adds to the efficacy of the remedy used. To abort the expected paroxysm quinia should be given immediately after the preceding one in doses from four to five grains every three or four hours, until a sufficient quantity has been given, which is usually a full twenty grains. To prevent relapse, quinia must be given at certain intervals on the second or third day, and on the fourth and sixth days after the date of the first administration, according to the type. Having in view the tendency to relapse

at subsequent periods quinia should be again given on the twelfth & the fourteenth, and on the nineteenth & the twenty-first days. In the pernicious type quinia should be given in large doses at short intervals, hypodermatically, per enema or by the mouth. Chronic intermittent may maintain a constant tendency to relapse in spite of cinchonism. In such cases anæmia and the malarial cachexia are usually present. The remedies most successful in such cases are Arsenic, Iodine, Iron, Mineral acids, ect. The remedies used should be adapted to the several indications. Cicuta, Salvia has recently been used as a substitute for quinia. The dose

given in a teaspoonful of the juice or in hot lemonade an hour before the expected chill, to be repeated in half an hour if perspiration has not appeared. The advantages claimed for it over Quinia are; It acts more promptly, there is less nervous disturbance, it can be taken for a longer time without depression, It is eliminated more quickly and is more palatable and is not incompatible,

As a prophylactic Quinia in small doses, while exposed to the Malarial poison, say from two to five grains every morning, and avoid exposure to Night air.

Ague

Definition.—

A specific noncontagious fever, produced by malaria; characterized by enlargement of the spleen and recurring attacks of fever attended each with a cold, a hot, and a sweating stage; and having a tendency to recur, which may last for many years.

Causation and history.—

What, it may be asked, is the condition common to all the variously situated regions which causes ague? Is it high temperature? Clearly not: for many of the hottest climates of the earth

are completely blameless. Is it the presence of water? The answer must be no; for, if aqueous vapor could cause ague, all who frequent the sea or live near rivers, should contract ague; and especially aguish districts should be most danger-ous at those very times when they are now most free. Is it the presence of decaying vege-table matter? Again the answer must be no. Decaying vegetable matter exists abundantly in places where ague never occurs; if such could cause ague Londoners should be infected by the contents of their

The dust is a and of the mig in
lead of Cor: Common marsh
But the specific influence of decay in
vegetables in the causation of Malaria
is disproved by the fact that fever
prevails in certain places where no
such matter exists. It would seem,
therefore, that neither heat, Water, nor
decomposing organic matter is alone
capable of evolving the Malarious
poison; but that for its production
there must be a certain porous
character of soil, a certain degree
of saturation of this soil with Water
the surface having undergone
desiccation — and a certain elevation
of temperature.

It may be added that nothing is more certain than that agueish districts may be rendered perfectly healthy by drainage. Malarious poison is manufactured in the soils of Malarious districts and to be exhaled from the surface in company with the moisture which rises from it, and at night in far more abundant than in the day. It forms over the infected area a kind of invisible mist, which is denser and more potent in proportion to its proximity to the ground and which extends to no great height above it. It is observed that second floors of houses in agueish districts are more dangerous to sleep in than

are the latter series; it is also dangerous to drink water however pure it may seem to be, which is furnished by the soil of such localities.

What, then, is this miasm? Is it a gas, is it some decomposing organic substance, is it a living thing?

No direct proof has yet been adduced of the truth of either of these alternatives. There is, however, much both in the behavior of the miasm and in its effects on the human body to indicate a generic relationship with the contagia of infectious fevers, and to render it probable, therefore, that the last of the alternatives above

expressed is entitled to acceptance.

Symptoms and Progress—

It may make its appearance in an and twenty hours after person has been exposed to it, or it may go months before it makes its appearance.

Agues presents itself in two distinct forms, which pass one into the other by insensible gradations.

The first of these is the Intermittent fever, which is common in temperate climates and comparatively mild;

The second is the Remittent fever, which occurs chiefly in the tropics, and is of great severity and danger.

We will first describe the phenomena of Intermittent, then, Remittent,

Intermittent fever is characterized by the occurrence of febrile attacks of some hours duration separated from one another by periods of apparently, or at all events comparatively good health. The patient is attacked with headache, and general malaise, with a sense of chilliness, and weariness, muscular pains, and epigastric discomfort. The sensation of chilliness begins on the back extending thence to the rest of the body. The shiver is converted into a severe rigor, attended with violent chattering of the teeth and convulsive twitchings of trunk and limbs. The skin becomes dry, the tongue

furred. During this stage the pulse is weak, frequent, and often irregular; the respirations are quick and sighing; there is loss of appetite, thirst, and the urine is pale, abundant and passed frequently. This is termed the cold stage. it varies very much it may last only a few minutes or it may continue for many hours. During this stage the temperature of the patient is above normal and rises rapidly. The temperature may rise to 105 or 106. After the cold stage subsides and the next, the hot stage commences. The patient begins to feel comfortably warm and the skin white and livid surface assumes

the smoothness and hue of health. But gradually the sense of heat gets intense; the pulse becomes fuller, stronger, and soft but maintains its frequency; the urine is still abundant but of a darker color and higher specific gravity; mental confusion is not infrequent and there is often delirium. The hot stage lasts from one hour to five or six, or it may last for twelve hours.

The hot stage is succeeded by the sweating stage. The patient will feel somewhat comfortable, moisture will appear on the face and rapidly involve the whole surface; the temperature rapidly falls, the pulse becomes less

frequent and softer; the respirations resume their normal rate; the loss of appetite and thirst disappears; the patient may fall into a sound sleep. The duration of this stage is various but generally shorter than either of the other two. The "Intermission" is the time that elapses between the attacks. In one variety the interval is twenty four hours or thereabouts, and there's a daily febrile attack. This is termed the Quotidian ague. Where the interval is forty eight hours more or less, and the paroxysm occurs every other day, it is known as the Tertian ague. Where it occurs every third day it is the "Quartan ague"

In some cases we have what is termed double tertians or double quartans. In the double tertian the febrile paroxysms occur every day. In the double quartan, the patient suffers, as it were, from two series of quartan attacks, the first series of similar paroxysms occurring say on the first, fourth and seventh days; the second series occurring on the second, fifth and eight days.

Remittent Fever—

This form of ague is most common in tropical climates. It is more dangerous than the Intermittent fever. Its distinguishing feature is that the febrile paroxysms which come

on once or twice a day, are not separated from one another by intermissions of complete apyrexia, but are rather to be regarded as exacerbations of an abiding febrile state. The cold stage is very short and mild, sometimes escaping recognition; the hot stage is much prolonged, lasting from six to twelve hours; the sweating stage is imperfectly developed, and merges into the period of remission from which it is undistinguishable.

Pathology—

The pathology of ague is very obscure; and morbid anatomy throws but little light upon it. We know

that a poison is taken into the system, and that this remains incor-porated with it for an indefinite period, giving rise at irregular intervals to more or less distinctly periodical attacks of well-marked fever, attended with rapid destruction of tissue, high temperature, and con-gestion of internal organs, but more especially of the spleen. Where the poi-son lurks, why it acts periodically, and on what organs it acts chiefly are mat-ters concerning which is still yet, not clearly understood. Enlargement and induration of the spleen and liver are among the common results of repeat-ed attacks of ague.

Treatment

The prophylactic treatment should be attended to, by draining and clearing away underwood if such be the cause; all precautions should be taken by not sleeping in the lower rooms, not drinking the water of such localities unless well filtered, should not go out at night, nor very early in the morning. The medical treatment should be first, to treat the paroxysms and then the disease or rather the cause. During the cold stage we may apply warmth for comfort sake during the hot stage we may apply cold by cold packs or sponging.

Cinchona, and its alkaloids, and arsenic are true specifics, Iodine has also been used with great success. The Sulphate of Quinine is the preparation most used. As to the dose in which it should be given is a question among some autors, By some it is thought best to give thirty grains at a dose; some say just before the paroxysm, others say just after or during the sweating stage, others say give it in alterative doses. Prof R. M. Shoop says give it in five grain doses every two hours commencing twelve hours before the expected paroxysm.

J. C. P. Brown

1881

James J. Hamill

Prolapsus Uteri:

The normal position of the uterus in the pelvic cavity is about two inches from the vulva. When from any cause it descends so as to occupy a position lower than this, it is said to be in a state of prolapse. This abnormal position of the uterus is of frequent occurrence, and is known to the laiety under the name of "Falling of the womb". There are three varieties of prolapsus, denominated, first, second and third degrees. In the first degree the uterine axis is bent forwards; it is slightly antiverted and sunk

in the pelvis. In the second degree the body of the uterus is turned towards the sacrum, the cervix having descended to the Ostium vaginae. In the third degree, the last resistance is overcome, and the uterus is partly, or entirely extruded from the vagina. The uterus is sustained in its natural position by the surrounding areolar tissue, which binds it to the bladder, rectum and pelvic walls; and the uterine ligaments. These are eight in number.- the utero-vesical, utero-sacral, the broad and round.

The abdominal muscles exercise a considerable degree of retentive power; also the vagina. In all cases of prolapse, the ligaments are enfeebled by increased tension. The causes are predisposing and exciting. The predisposing causes, are child bearing, laborious occupations, advanced age, habitual constipation and strumous diathesis. The exciting causes are numerous, and may be divided into four classes. 1st those increasing uterine as Tumors, hypertrophy, pregnancy or retained fluid. 2nd causes connected with enfeblement of uterine supports, as a

very large pelvis, laceration of perineum, loss of tonicity in ligaments, atony of abdominal muscles &c. 3rd Causes forcing the uterus down, as violent coughing, ascites, tight and heavy clothing, straining at stool &c 4th causes which drag the uterus down, as shortness of the vagina, prolapse of the bladder, vagina or rectum. There is generally a combination of two or more of the above causes, while one is especially prominent.

Symptoms. These depend upon results of the displacement. Mechanical interference of

the wound with surrounding parts, and alteration induced in its circulation and tissue by reason of its abnormal position. It may be even in the third degree of prolapse without any marked symptoms but there is generally congestion, areolar hyperplasia, and granular degeneration, which render it sensitive and intolerant of pressure. By dragging upon the bladder, rectum and pelvic areolar tissue and fasciae, and protruding between the labia discomfort is produced and locomotion

interfered with to a great extent. The most prominent symptoms are a sensation of dragging and weight in the pelvis, rectal and vesical irritation, pain in back and loins, great fatigue in walking, inability to lift weights, leucorrhoea and other signs of congestion. In prolapsus there is not generally any disorder of menstruation, and sterility does not ordinarily exist. These immunities are probably dependent upon the fact that the uterine catarrh which exist is rather the result of a passive

congestion of the endometrium than true inflamation, and the axis although altered is not bent upon itself so that an obstruction is produced.

Physical Signs. All the detailed symptoms can be elucidated only by an examination. Should prolapsus exist in the first degree, the body of the uterus will be slightly anteverted and the os low down in the pelvis, pressing upon its floor. As the finger is passed upward in front of the cervix and along the base of the bladder, the resisting

anterior wall of the uterus can be clearly distinguished. If the second degree have been reached, the os will be found at the ostium vaginae, prevented from escaping by the sphincteric muscles, and the body will be slightly retroverted. Sight and touch combined will make the diagnosis of the third degree easy. The uterus in this degree will be found partly or entirely out of vulva. When the uterus is procident and a sound introduced it passes up five or six inches. When the organ is replaced and

the sound introduced it only measures three or four inches. Differentiation. Prolapsus may be confounded with fibrous polypus. inversion of the uterus, and hypertrophic elongation of the neck. From these it can be easily distinguished. From polypus it may be known by presence of os and cervix. From inversion by presence of os and shape of the mass. From elongation of the cervix it can be recognized, by length of cervix which elongation presents, and the impossibility of replacing the supposed

prolapsed organ, and the great depth of organ discovered by uterine probe.

Prognosis. In the majority of cases a great deal can be effected by medical and minor surgical means, and complete restoration of organ to its normal position. If the displacement is caused by a tumor nothing can be done unless the tumor is removed. In cases where it is due to prolapsed vagina, bladder or rectum cure can be affected by means appropriate to the relief of these abnormal conditions.

Prolapse of Uterus produces various complications. Such as congestion, endometritis, hyperplasia, hypertrophia elongation of cervix, cystocele and rectocele.

Pathology: Gynecologist are at variance as to this. Whatever the cause may be, it always produces diminution of uterine supports, in power. The ligaments are stretched, the vagina distended and doubled upon itself or everted and the contractile power of the sphincteric muscles impaired. The organ is generally affected with inflamation of the mucous membrane

lining its cavity. Solutions of continuity appear upon the cervix. The vaginal rugae are effaced and the lining of canal exposed to atmospheric influences and friction looks like cicatrized surface of scalded skin rather than mucous membrane. Treatment.
The first thing to be done is to return the displaced organ to its normal position. Then we must keep it in position. It is not generally difficult to replace prolapsed uterus, but in some cases it requires intelligent tact. When there are difficulties in replacing it, the patient

should have rectum and bladder evacuated and be placed in the genu-pectoral position, in order to gravitate the abdominal viscera towards the diaphragm. She should be on a floor or table. Ten or fifteen minutes should elapse before attempts are made at reduction, in order that congestion may diminish. Then take the cervix into grasp of the index, middle and ring fingers, push the uterus forcibly upwards in coincidence with the axis of the inferior strait. While the right hand is thus employed, the left

rest upon the back of the patient to steady her body. No sudden or violent force must exerted, but steady pressure kept up for fifteen minutes if necessary. Most cases will yield. In some extreme cases it may be necessary to put the patient under an anaesthetic. Methods of Sustaining the Uterus. The original cause should be ascertained and treatment directed to the cause as well as effect. If it be due to pressure from above as tight lacing and heavy clothing, the weight should be removed by the use of Skirt supporters.

If it be due to Ascites, we should direct our treatment to the underlying cause first, then to the effect. The abdominal supporter is often beneficial where the cause is relaxation of the abdominal muscles.
If it be due to increased weight of uterus means should be adopted which will diminish weight of organ. Polypi, tumors &c. should be removed by operation. Inflamation, hypertrophy and congestion should be relieved by appropriate treatment. Laceration of cervix should be united with stitches.
If it is due to loss of

strength of uterine supports.
Our treatment should aim at their restoration. The recumbent posture, local astringents, General tonics, pessaries &c. Pessaries constitute a valuable means of supporting the Uterus, but must not be relied on as the means which will effect a cure of itself. In selecting a pessary, choose one which will support the Uterus without distending the vagina. Almost any pessary may be used with advantage, especially Meigs elastic ring pessary, Hodges, Smiths, Hewitts or Thomas. A pessary should be examined occasionally to see if it is injuring the tissues.

Perineal supports are sometimes of service in supporting the uterus. Perineorrhaphy. This operation which consist in sewing up a lacerated perineum, is of great service where this body is ruptured and support to vagina lost. Should the cause of prolapse be due to over distended or prolapsed vagina, great relief may be obtained by colporrhaphy which consist in narrowing thro canal by passing sutures through its anterior or posterior wall.

Written by James J. Barrell and submitted to the Faculty of University of Md. Medical College.

1853

S. E. Shellhouse

Epidemic Dysentery.—

In entering upon the consideration of our subject it may be well to take a general though rapid view of the classification of bowel lesions, and then develope the peculiar points appertaining to our specific subjection. The manifold varieties may be grouped under four general heads, viz.—

(1). Acute Diarrhoea,
(2). Acute Dysentery,
(3). Chronic Diarrhoea & Dysentery,
(4). Tubercular Diarrhoea.

The crucial diagnostic symptom, between the first and second headings, is the absence or presence of Tenesmus. In acute cases in which Tenesmus

will belong to the bowel dysentery. The third section is not determined by Tenesmus, but by elevation and secondary lesions, with accompanying symptoms. The fourth class refers to those who are afflicted with the tuberculous diathesis. The subject of our thesis falls under the second heading — which we divide into — (A). Inflammatory or Catarrhal Dysentery —

(B). Diphtheritic Dysentery.

We are aware that in making our classification we do not agree with our authorities — but there is such confusion between these called "Standard," that we

[illegible] that [illegible] which appears to us to be in accord with nature, and conformable to modern scientific investigation. Devil's Dyke, [illegible] is one of the most frequent, picturesque, and [illegible] scenes that has occupied the attention of the profession since the earliest age. In ordinary times the devil's wall is largely made up from its margin — but when the tread of war is sounded, and the tramp of moving multitudes resounded in the land — then it puts on an aspect of terror, and gathers in its victims by the thousands. Imperfect as are the records of the dark ages, they show that many a [illegible]

[illegible] use of the [illegible] [illegible]
[illegible] the [illegible] [illegible]; [illegible]
[illegible] and [illegible] the [illegible]
[illegible] for [illegible] and [illegible]
[illegible] among the [illegible] [illegible],
we may readily [illegible] that the
[illegible] [illegible] must have been [illegible]-
[illegible]. Although recorded as
[illegible] by [illegible], the [illegible]
[illegible] of [illegible] [illegible] have
[illegible] [illegible] and [illegible] to [illegible]
of the [illegible], and the [illegible] [illegible]
[illegible] [illegible] [illegible] to [illegible] [illegible]
[illegible] the [illegible] of [illegible] [illegible]-
[illegible]— [illegible] [illegible] [illegible] [illegible]
[illegible] the [illegible] of the [illegible], and
[illegible] again [illegible] of the
[illegible], or [illegible], [illegible] [illegible]

[illegible] further regarding these differences it is unnecessary, at present, to direct our attention to those cases of clinical flux which result or arise, unannounced with diarrhoea, or a prominent symptom. Thus the inflammatory process upon which the flux depends, affect the mucous membrane of the descending colon and rectum — so that the expulsive effort becomes principal. As mere intensity does not determine between diarrhoea and dysentery, it is equally true that only a slight degree of inflammation, located in the region mentioned, may produce the peculiar

depositions of many diagnosticians, it has been noticed, that the same general forms of acute inflammation produce the exactly same to describe the form of the inflammation and the national symptoms these brainstorm. So are pathognomonic deductions we must not be considered as admitting the idea that "Diseases do ipso" because dyscrasy, - for the depositions may also be caused by accidents, stress in the bladder, fornication, etc. and in making a diagnosis these must always be taken into consideration. Cutaneous dyscrasy may be a large number of instances manifest inflammations, - especially

if the patient be surrounded by the proper hygienic conditions of treatment. While it is generally treatable — it may pass into the diphtheritic form: — and, in fact, we can not always <u>absolutely</u> diagnose one form of the disease from the other, by any means short of a post mortem. Possibly, if desired, means might be found of throwing light into the Rectum, and making a diagnosis by the eye. While the Statement "False cases are generally diphtheritic," may not sit well in the Tractarian pen it expresses a truth. Such cases have died from so called typhoid diarrhoea, and chronic dysentery,

only rarely suffered from intestinal secondary disease. When the chronic form of the disease exists, serious diarrhoea may be discharged at stools and produce shock of the nervous system when the diagnosis is generally avoided; nor are we not protected by the fact that secondary membranous may occasionally exist in the bowels without occasioning marked irritation or more serious consequences. Occasionally such obvious cases occur, that sufferers have been heard to remark about patients, that they were passing portions of their bowels; in such cases the membrane has formed perfect tubes, and is separated as such.

A close parallel may be drawn between diseases of the throat and those of the bowels. As we have sore throat, with or without ulceration, so we may have the catarrhal or according to the old nomenclature, the mucomatic dysentery, — with or without ulceration and, as again, the throat may be lined with false membranes so may the bowels likewise. Also the general morbid may be needed that such ganglia as are beneficial for disease of the throat are equally suitable for the bowels when used as injections. The frequency of membranous formation on mucous surfaces

[illegible] fully occupied with the business of the present century. Cook [illegible] known to others, yet we owe a debt of gratitude to the Government authorities Wrothers, Finnegan, and others, for calling the attention of the profession so strongly, to facts that have now received proper attention. Wrothers is probably the first who applied the lamp ophthalmoscope to instrument [illegible] The same idea was simultaneously intuited by John Shantz, when his attention was directed to vaginal length, as a common sequel to some inflammations of the lower part of the

as has been the formation stage of Gelle, it is not so certain but that his "three grades" so generally accepted as the true division in the diphtheritic series — may not fundamentally include the pituitaroid or catarrhal and the diphtheritic varieties — the latter in two degrees of intensity. Again the truth may be covered up by the adjectives — Benign and Malignant, Sporadic and Epidemic, Sthenic and Asthenic, — applied to symptomology by various authors of fact stage. As diphtheritic symptomology may be an advanced stage of the catarrhal variety, we proceed to describe the symptoms of the latter disease. —

often, after some or two days, the patient is attacked by a general sense of uneasiness, both in the abdomen and the stomach. Sometimes the symptoms resemble dysentery. Often a few hours succeed abdominal griping with frequent desire to go to stool. The first discharges are generally feculent and fluid, but are accompanied with tenesmus, when the discharges are bloody and mucous, and without feculent admixture, from the beginning. In the Cutaneous variety we rarely meet with a chill preceding the other symptoms, which in the intermittent form, the chills are the consequents are generally severe.

When Chordee has been established for some time it is with considerable rapidity, and the symptoms are as follows:- Paroxysms commencing during sensations similar, and after following the recording and descending colon,- pain in the loins and sacrum - sensations, intense and painful by the effort desire to empty the bowels,- spasms of the expulsive muscles - straining and the discharge of mucus, muco-pus, or sanguinous blood. The terminal and terminal sense pain in the urethra and Rectum, and the effort is discharge is not followed as in cases of stricture. Sometimes the paroxysms occur at

intervals of hours or even of minutes, and occasionally the patient is obliged to sit up in bed. The increase that most distresses in the case causes the patient to seek a recumbent posture: nausea and sometimes vomiting occur, with varying degree of prostration. Pulse and tone increased, tongue and water tongue with thirst. The pulse generally rises as high as one hundred, with a slight elevation of bodily temperature. Generally the patient, as in the disease attended by perforation, is better in the morning, and worse as the day advances. By these generalizations the patient may

Debf,- become debilitated, or even Exhausted,- while during subsequent the fatal trend of complications does not appear. Such is an outline of the course of the disease.- Should it take a favorable turn the intensity of the symptoms moderate and convalescence ensues, but on the other hand it may become chronic or the diphtheritic membrane may appear:- in fact the chronic form may itself become diphtheritic.- Probably most of the pseudomembranous cases are primary catarrhal,- however where the diphtheritic poison is prevailing, cases of the mixed ——

depending upon a well marked prodromic symptoms. In case that the catarrhal, common the exhilarating fever, the course outlined will probably be followed in most. There are aspirating moans, the patient becomes bewildered, - the tongue brown and dry, or red, smooth, and dry, - sometimes fissured, - the thirst and anorexia become extreme, - the abdomen tender, - the Colon distended with gas, - the complexion darkened or yellow from absorbed bile, - the expression anxious, - the sunken or glassy, - the brain comatose, - the countenance bright-red, and finally death closes the scene.

In the cases of the cholera above described, the stools change. At first watery, and stringy, and mixed with blood or pus, they next contain yellowish or reddish masses of mucous digest, which when examined by the microscope to be dead portions of the villi. Secondly layers both thin and a reddish serum which often almost take the place of the fecal matter, or appear as shreds fragments of meat were mingled in bloody water. - Accompanying the above changes we must add the change of odor which formerly became of a cadaverous offensiveness that nothing else resembles.

illness, towards the close the urine becomes red and albuminous, profuse sweat may occur, and bronchitic symptoms commonly force check the rates. The cases of diphtheritic dysentery have no particular duration, but vary from the rapid epidemic form, such as some of in crowd prisoners, to those lasting to the third, even after the appearance of the first convalescence, or even longer. While death may occur at any time, it is more apt to happen during the third or fourth week than at any other period, - and its advent may be announced by a change of state to a brown, red, or black tint a

bowel stools from the inner mucous of mucous and bottom down membrane, from the skin exhales a putrid odor, that nothing can destroy,- and only those whom duty calls can stand the offensive presence, which with Subsultus and hiccough the patient dies in death. In the Epidemic variety, confined to adults, where the disease is "ab initio," we remarked that the chill and fever were both more violent,- but their course soon present the typhoid outline with weak pulse, comes on the tongue, red tongue, tender abdomen, Subsultus tendinum, and delirium on coma. Occasionally they [illegible]

early in the race, although since a case of Asiatic cholera, or fever from which convalescence occurs it is generally ushered, alternating spasm of better and worse, and such change is generally to be read in the stool, sometimes months elapse before health is fully restored. The extreme tenderness of the bowels is generally left behind, and any indulgence in dish or spoon to meal or milk is liable to occasion a relapse with its gates results. Such is an outline of the disease as commonly seen, yet, as in all diseases, unusually severe cases offer, and this is more simply when other diseases complicate or

modify its course. In a more extended work than a sketch, it would be well to describe minutely the appearances of the stools which represent the various stages and degrees of intensity of the disease. They may be briefly outlined as follows:- Fecalent matter generally characterizes the beginning of an attack, which then has in the form of diarrhœa or dysentery. Sometimes, small quantities of fecalent matter may afterwards appear,- generally are bloodstained,- and their presence or absence seems to be related to the degree of constipation which preceded the attack. Again, when the case is favorable, such

matter again appears, but under many forms as regards color and consistence, - determined by the nature of the diet, hepatic secretions &c.. There is a glassy pellicle, albuminous, white or yellowish mass, appearing at the beginning of the disease. Largely consisting of cells shed from the mucous surface, it is generally tenacious or stringy. After a time more of the yellow color appears, showing the formation of pus or muco-pus, and when the passages are discharged in a vessel containing urine, the yellow mixture may be easily mistaken for bile, as, unlike the mucus it is miscible with water.

that the above substances generally appear as irregular masses of the white blood corpuscles, should we examine by the microscope. Sometimes fatty-like bodies appear, which have been very aptly compared to frogs eggs:- these also appearance has been observed also in healthy discharges,- and, when tested with iodine, these show their composition is starch. Pus granules and blood also appear,- the latter strings and streaks, or thoroughly mixted,- the first appearance being generally indicative of disease in the rectum,- the latter higher up, in the colon. Generally speaking we will find the amount

of blood discharge to account, unless the fluid is of a hemorrhagic consistence from serous. The source of the blood may be from the mucous surface proper, from veins, or from ruptured capillaries. Such are the appearances outside of those which now require our attention as appertaining to the presence of diphtheritic complication. In examining a gut, that has been affected in Serous membrane, we are struck by the fact that a vascular fibrinous layer has often permeated the mucous and submucous layers of the intestine. The so called "fungus"

growth seems to have a power of penetrating the surface and ulcerating beneath with its cells,- afterwards in separating to bring away the original mucous, and even submucous membranes, and as a thickened coating to be removed in a sash or broken down in threads to come away in stringy mucus,- or finally to be voided as a mucous and purulent semi-fluid. As the breaking down of the pseudomembrane may place of the intestine whose vitality is destroyed may go quite off, and, in those intense cases involving the submucous coat, the muscular fibres of the intestine are often

left visible at the bottom of the diphtheritic ulceration; this is the most severe form: otherwise the submucous membrane forms the bottom of the ulceration, or in the mild cases the mucous membrane is left entire,- only the face cast sloughing off. In practice we will generally find the different degrees of sloughing exhibited in different parts of the same affected tract. The slough may separate in pieces of almost any size, from that recorded in the Edinburg Medical and Surgical Journal, (vol. 46. p. 102.), where the whole lectum appeared to hang out for two days, before separating;

down to the size varying from an inch - to one half an inch; or even less in length. Microscopically the pseudomembrane, if superficial, - is composed of granular or indistinctly fibrillated fibrine, with pus or blood corpuscles scattered through it, - or aggregated in layers. When true sloughs occur the glands of Lieberkühn and other structural elements of the mucous or submucous membranes may be readily recognized. These appearances are, however, mostly confused by the incipient decomposition, and in advanced cases we may be able to recognize nothing but

a granular decomposing mass of gangrenous tissues. In the latter condition greenish, brownish, or even blackish, fragments of the mucous membrane float in an extremely fetid and shiny fluid. We incidentally referred in the beginning of our thesis, to cases of pseudomembrane of the bowels, even without diarrhoea or dysentery. Such cases, we will remark in passing, are liable to be confounded, with the one we are considering - by the inexperienced - however the differential diagnosis is easy - Such cases are generally observed in hysterical

women, or hypochondriac men,—who have had dyspeptic troubles or other ill health for variable periods. Such cases differ from diphtheritic dysentery in continuing for several months. Frequently the complaint is paroxysmal, and preceded by the formation of abdominal tumors, with griping. In females the cases are almost uniformly accompanied by uterine troubles. The term tubular diarrhœa, for this disease, is a misnomer, as, though rare, we have met with a case accompanied by costiveness, and in which the false membrane only passed when removed by active purgation.

The diagnosis by the microscope is determined by the fact that the so called "tubular diarrhoea" the membrane is mainly composed of epithelial cells, while granular fibrin constitutes the base of the diphtheritic membrane of dysentery. The generally accepted theory of diphtheria claims that the disease is only a mass of fungal growth, but, even at the present day, the subject is veiled in some obscurity and doubt. The trouble in accepting it, arises from the fact that the same vegetable forms, that have been described as producers of this disease,

have been found in cholera, typhus fever, common diarrhoea, and even healthy stools. Possibly the rod-like bacteria, - the supposed basis of the virus, - while closely allied may really be different forms:- just as is claimed in the recent discoveries of the Bacillus as a cause of tubercle, and an acute form of the same as a cause of leprosy. Possibly the true theory is that these parasitic forms may exist at all times in the bowels, or on the bucal mucous membrane, and only become a factor of disease, when other unhealthy conditions, - form the

human standpoint, favor their development in immune animals. The parasitic theory has the endorsement of several brilliant physiologists, including Virchow, whose name alone would give it respectability. It accords with the apparent splitting off of surface membrane by cell proliferation, as occurs in desquamation, - and agrees with the generally accepted idea of contagion. - diphtheritic deposits. We could include in our thesis many accidental complications and accompaniments of diphtheria, but as physicians we proceed to the end of all our efforts, -

namely, the Prophylaxis and Treatment. Regarding the prophylaxis of diphtheria a much important point should be carefully regarded. With the discharges from the patient be always covered under ground, as soon as possible, and let the water in which the stained garments are washed, be treated likewise. When possible disinfect. Carbolic acid, creosote, sulphate of Iron, or Lime, may always be obtained; and their free use will prevent much disease. Treatment:- Let the patient be at once put to bed, as exercise, except in the convalescent stage, is sure to aggravate the disease. Ventilate the

sick room, keep every thing as cool as possible, and do not over crowd. Regulate and properly adapt the diet. Let the food be the most nutritious and digestible that can be obtained. In past days bleeding was largely practiced, but, when the indications are present, arterial sedatives are much better. In the beginning of cases, when the stomach is loaded, emetics may be useful - as such:- under all other circumstances we regard them as harmful. Opiates and Nervines should be used, whenever indicated, and the emetic,- Ipecacuanha,- in less than emetic dose,- is useful with the former. Should

laxatives be indicated, Castor Oil and Rhubarb are about the best. Regarding the use of mercurials, the lamentable abuse of these articles by the old school of practitioners, has caused a reaction and now they are not employed enough. Calomel and Rhubarb is a fine prescription for the early stages of many cases, remember however and only use mercurials with great care and moderation. The refusal to use mercury, at all, in dysentery, is as absurd as the old, heroic, and murderous treatment by Calomel and the lancet. Regarding Pilocarpine, it will take the place of any other diaphoretic agency, and may when properly used, prove beneficial.

Hyoscyamus and Belladonna will sometimes take the place of opium advantageously. Quinine, blisters, nux vomica and Strychnine, acetate of lead, bismuth sub-nitrate, lunar caustic, and Kino, need only to be mentioned as oftentimes serviable in dysentery. Of specific prescriptions we warmly advise the use of such nostrums as the following, - or others of similar type. -

℞. Hydrastis Canadensis g.s.	℞. Argenti Nitras. gr. xij.
Chloralis of Potassa ʒij	Aquae. ℥ʒvj
Boiling Water Oj	Inject.
Make an infusion and inject.	

Finally we will sum up for this disease, as well as for all others; Common Sense, in the use of such means as we have at hand, is far better than all possible conveniences and a deficient Judgement.

1559

(1) [illegible]

The [illegible] of [illegible] is not [illegible].

The direct [illegible] [illegible] [illegible] that we have [illegible] the introduction into Scotia [illegible] the [illegible] the [illegible] [illegible] [illegible]

are syphilitic. Nursing a healthy child by a mother, even if she is free from syphilis, will produce syphilis, but this is rare. As regards the secretions of the mammary gland.

It is doubtful if the female disease is contracted by lactation, but there are many therapeutic agents which may be communicated.

Venereal nurse may contract syphilis from a syphilitic infant, or vice versa. Other means, the secretions, the skin, the saliva, or the breath, or abraded tissues, all serve as contagion of syphilitic secretions.

Sometimes we find patients

wife's wife's present relations
but they denied it.

For instance we authenticate
one of the following cases:

A man had connection with
a prostitute, a few hours after
wards he had connection with
his wife, and transferred the virus
which he had carried concealed under
his prepuce, from the vagina of
the prostitute, to that of his wife.

The wife was infected and
her husband recalcitrant.

Again, the lover of a Lady
wife deposited the virus in the
vagina, and in a short time she
had connection with her husband.
The husband was infected

and the site occupied.

Since the lowest right ventricle of the heart contains "the seat of disease. It shows neither exists or appears". Inoculation would take place in fissure or abrasion of skin, cuticle, mucous, or by virus being concealed or retained in the pelvis, or folds of the vagina.

The virus usually has an incubation from ten days to four weeks, generally about three weeks.

After inoculation the abrasion heals and remains dormant the primary chancre shows in the site, which generally occurs about the third week.

The shortest time observed is eight

dage. The longest time is seven
days. Red, or Thirsty
dog: "The initial lesion first shows
to the touch like a bean just
under the skin." In a short
time it feels like a shot pea with
the flat side down.

This indurated det wit enlarges
but retains its original shape and
hardness. The skin and hard-
ness extends upon the density of
the surrounding tissue.

In skinny or areolar tissue
the induration is slight.

Induration usually precedes
ulceration but it may follow it.

Generally, when the sore
becomes chronic, the induration

papules remain. Nothing shows it a syphilitic chancre. Once it ulcerate, it may remain an indurated tubercle without ever breaking down, or it may remain a mere non-healing.

When it is said to ulcerate the edges are elevated with a deep shallow-basin like pit.

Sometimes the base is red, again it is covered with a white pultaceous deposit, but the edges are never abrupt nor undermined as in chancroid. The discharge is thin, scant, sero purulent, serous or bloody. The discharge is never strictly purulent unless a non specific inflammation exists.

Even when the indurated varicosity, there may be no discharge, the skin is quite left, there is no chancroid, and it may be so slight that it may exist without even being noticed by the patient. Hence a patient may have syphilis without even suspecting that he had had a chancre. Some syphilis if he has acquired it thereafter. Syphilis unlike chancroid is not autoinoculable.

The sore is about the size of a split pea to a nickel, rarely they are as large as a quarter or half dollar.

The primary sore never heals under two weeks, and may last for months, even after secondary lesions appear. Re-infection is [illegible]

In our day, we know the whole subsequent life of patients who have received an injection of serum.

"We shall see even trivial, transient, pain, or slight physical phenomena, with alarm lest they be the harbingers of loathsome alienations, neuroses, affections, paralysis or some one of the thousand sentinels that are ever more than faithful".

Chancroid is to be distinguished from chancroid in the following manner.

Chancroid has an incubation of a short incubation, from a few hours to ten days. Chancre is much longer, from ten days to two weeks. The virus is a local disease, and not constitutional, which

is found to be hereditary and communicable. Syphilis is a constitutional affection and is not communicable. "Chancre begins as a papule and remains an erosion or ulcerates." "Chancroid begins as a pustule or vesicle and remains an ulcer." Chancre is generally unique, chancroid is multiple.

Chancre edges are slant, bacon shaped, hit with scant, thin discharge. Chancroid is deep, a true ulcer, with abrupt or undermined edges, with a copious discharge. Secondary constitutional lesions in from three weeks to four months, very rarely after four months.

and treatment being secondary syphilitic. Frequently simulates recurrence the appearance of secondary eruptions.

The eruption must be distinguished from simple acne and chronic alcoholism.

When there are much doubt the eruption may be treated as for syphilis. Secondary manifestations appear when the skin is running loose.

They may be rose, or copper colored, slate, slight in color or a decided stain.

The secondary eruptions are said to appear when the skin is the least healthy.

Arteria, pulmonary, mitral, tricuspid, aortic, pulmonic and tricuspid valves.

At the same time may be seen the following manifestations on the thoracic surface:

Erythematous and adenous mucous patches, scales patches &c.

These are all general symptoms except the tubercles and scale patches which are other late in the secondary outbreak.

The acne and the papulo-pustules appear at least.

The bullae and the vesicles generally appear in the cachectic.

The tegument and mucous kinds of nutrition on the same individual. Where the disease

should produce one kind of eruption in one case and another quite some in other is not known.

But this is probable to be accounted for more in the habits and general health of the patient than in the peculiarity of the disease.

Measles catches generally about from three to eight weeks after the chancre. The eruption in the face, lateral marks, arms, neck, forehead, between the toes, under the breasts, between the thighs, is seen wherever two surfaces touch each other. Erysipelas of the secondary eruption is not infrequent, but erythematous it rarely should be mistaken. The eruption

is a mode of tuberculosis, but to be only admissible it is more.

The division of syphilis into primary, secondary and tertiary is arbitrary. There just as there are between one period and another, in a majority of cases, is indescribable.

These frequently exist at one time in each other.

For instance primary chancre may continue for weeks or even months after secondary secondary lesions appear.

Or secondary lesions may exist with tertiary!

Ex. Ten syphilitic cases which have had less than two years after chancre and yet have been delayed for fifty or

or first years, or was never developed! Surely this is a case where the individual contracted chancre at 17 years of age, and had progressed to tertiary stage.

He was treated and no more symptoms appeared till he was 69 years of age, 52 years after chancre, when he presented a marked gummy treatment, and two years later a gummy tumor of the thigh, which gradually decided to Erichi of Malach."

Had he died when 68 years of age, we might have said he had been cured of Syphilis.

There is no febrile movement accompanying the tertiary lesions.

The tertiary is a much gravier

from there the secondary involve the viscera, the force the brain, the nerve, and infate all the vital functions. Illustrations: "The tumor effect is with Shore stalk in a disposition to the effusion of a fluid—some of small plastic material in many cases, tissue of the body, reasonably modified to a slight extent by the organ in which it occurs".

In this this stage the tubercular and fibrous deposits are recent. They are either encysted or diffused, and often result in ulceration and destruction of tissue. The common tumors are the size of a nutt, that of

are one and are frequently found in
rifle bullets and extremities.

Then, first after a wound
there should be a period of inflamma-
tion, the blood tunes dark & heavy,
stagnate, and then an action is
formed, which may become sen-
sibly painful.

In the latter stages of man,
which destroys the soft tissue and
open cause necrosis of adjacent
bone. These deposits may
cause a great many losses on
the nervous system, having their
site in the cranial vault, on the
meninges, on the dural cord
or in the ventricles, and the
brain itself.

Specific

Nor would this blood be inevitably home, suffering of the important nerve-sheaths, the nervous setting of the brain &c. which should be followed by, or even, discretion, vertigo, hebetude, dementia, melancholy and phthisis. The brain is more frequently affected than the cord, and a persistent headache lasting for months and even years, is a frequent symptom of brain lesion, that would not be seen if the above had occurred.

Syphilis is one of the most notable and inexorable enemies of life, health and happiness.

Strike down the most iniquitous and most pernicious disease.

Nothing his mother, his father, his husband, his condition, it has driven them from comforts and comfort, it renders him melancholy, joyless and miserable, and he is in danger not only to them but also to himself. And the trait is not confined to one set and here, it is transmitted to children.

It is hereditary the mental image that is transmitted to children.

There is so pathological fact more clearly established than hereditary insanity. The mother is said to be more likely to transmit it than the father.

Where the father and mother are both syphilitic the children are

rarely formed to term.

It seems that after a number of years the disease becomes less active and the 7th or 8th confinement may be borne to term, and have the child healthy. But in a short time a difficulty of breathing, accompanied with the peculiar sighing which first makes its appearance, soon destroyes the most robust & hale.

Mucous tubercles, or conglomerate masses of them, develope about the anus, mouth, nose &c.

Sometimes at birth the child is slightly deformed and has a sunken and bellied chest.

Some emaciation is quite

Phosphorus, Cancer Borbica and General Cachexia are very distinct and is not treated from the Marasmus or Starvation.

These children are said to have dense pallid Skin, with Sores or Fissures about the mouth, nose, ears, with prominent Malar bones, Square overhanging forehead. Sunken eyes to me, chronic catarrh, Bronchitis and Sore Throat.

Their teeth are irregular, fragile, short, with vertical ridges.

Convulsions may be prevented by treating the mother with Mercurius during lactation, it also prevents convulsions in the infant.

[illegible]

[illegible] death, the [illegible] and the [illegible] and [illegible] of [illegible] — [illegible] is [illegible] and the child becomes [illegible] and [illegible] [illegible].

The question is then asked: "Are there any [illegible] more?"

"I will [illegible] that in these days after the sunshine [illegible], we may [illegible] in post-death, the [illegible] in [illegible] death [illegible]."

But at any time, even after 25 years, should ill health [illegible] the sunshine may be [illegible], but in these [illegible] there is not life to let [illegible] children . .

conditions of health would make it advisable from the first to the third month but it may be delayed one year or even longer.

Treatment: "Le Mercure says: "that in 1540 an Italian surgeon cured Francis 1st of syphilis by the use of Mercury, since then Mercury has been the most important remedy in the treatment of this disease".

The profession is not agreed as to whether Mercury is a specific or not for syphilis.

In the days when all venereal sores were called syphilis Mercury was reported to have cured them

cases. But since the pathology of
venereal diseases are better under-
stood and classified we have such
different results, Mercury has made a
much poorer showing.

There is no doubt that Mercury
has benefited cured a
great many cases of Syphilis,
but I think it has failed in a
great many other cases, even where
it has been used early, systematically
and for a long time.

Since I do not think that we
are justified in saying that we
have a specific in Mercury.

Mercury is latent in nature and
I often contemplate whether the real

skin the skin or mucous membrane and it may permanently cure a great many cases. Bichloride in gum is the best form for internal use.

Some think it is more efficient when combined as follows:

℞ Bichloride of Mercury gr. viii
Iodide of Potash ℥ i
Water ℥ viii

M. S. 3 ℥ a day.

Rub in into the mercurial ointment in to 3 oz. every night. Give in pills then iodide of potassium & the last then bichloride & finally bichloride a new place every night. These pills should be administered.

Fumigation is a good to make in advanced stages. Mercury with the tongue

For the anæmic & cachectic mercury should not be given, but iodide of potassium & iron, with such tonics as strychnine, iodide of iron, cod liver oil, with good food and plenty of exercise in fresh air.

Lotions for the throat, mouth, tongue, and genitals, consisting of Borax, chlorate of potash and nitrate of silver are useful.

For the anæmic & cachectic, after their general health has been built up and the symptoms have been abated by the above treatment, mercury should be given for a while for its curative effect.

The use of Iodide of Potash
and sarsaparilla in the Eruption should
be continued for at least
after all capillaire has disappeared.
If reliable tests have shown the
Laboratory bacilli to contain
but the initial lesion, but be similar to
immunity when children with vaccine
and hence with standard, it is inferred
that it would be fallible.

D. F. Dermott

Gentlemen of the Faculty of
Med. Dept. Univ. of Maryland.
I herewith present in accordance
with the requirements of Graduat-
ing Thesis which will be found
enclosed within

Very respectfully
Your Obt. Svt.

Edward Clarence Fraser

Class 82-83

Dysentery

This disease is one of the most dangerous of intestinal diseases and almost fatal if not treated. It exhibits itself in specific inflammation and ulceration of the mucous lining and other parts of the bowels. It is usually the result of exposure or a persons mind unstrung, and for the purpose of getting rid of morbid secretions or malignant humors excited in different ways. Its nature is essentially the same.

It is endemic in all localities where malarial fever exists and in some cases is said to terminate

Constipation. It spreads
epidemic if there is an absence of
sanitary measures.

The predisposing causes are strumous
diathesis constitution, abdominal
weakness general debility.

The exciting causes are cold chills
damp atmosphere bad air heat
peculiar articles of food crude
indigestible food green fruits
and vegetables. Cartaceous food.

These causes do not operate
directly on the rectum, but on the
liver causing a depression of that
gland thus obstructing the return
blood from the liver from
the blood in its speak is dammed

back and cannot return to the skin. The seat of dysentery is the mucous membrane of the intestinal canal, and its nature is truly inflammatory — marked by irritation, irritative, and latterly a true inflammatory condition.

Take a patient living in a malarial district, he exposed to cold or damp when the body is overheated it will immediately repel the blood from the surface to the internal viscera which is intimately connected to the skin at least by sympathy. The internal congestion is marked by anorexia of appetite nausea, paleness

in this Commonwealth, bilious vomiting
yellow-coloured discharges
from the rectum. This engorgement
tends to the equilibrium between
the cerebro-and cerebro-spinal systems
and the latter irritated by the action
of poison is excited in an unequal
degree by the former. Hence the
first symptom of the disease is
from irritation due to the local
congestive inflammation.
The irritative stage is marked by
the beginning of the wandering
turning the non-flow of blood
from all the hepatic and intestinal
secretions are arrested. The ~~[illegible]~~
inflammatory stage is marked by

the whole mucous membrane of the entire digestive tract being in a state of inflammation. The mucous secretion secreting vessels, pour out intensely irritating secretions.

Effusion of blood from the intestinal surface might be expected, to relieve the congested organs but the whole contents of the bowels and their acrid secretions rather increase the general distress.

The pathology of dysentery gives us a clue to its varied symptoms — an inflammation of the entire mucous tract of the rectum due to congestion of the liver. Irritation — distention iron arouses

the abdominal muscles & frequent violent expulsive efforts. Hence the great tenderness, tenseness, pain & a griping character. When ulceration begins the desire to empty the bowels becomes more frequent & is followed by shorter intervals of ease. The ulcerations in dysentery would undoubtedly be much more numerous and extensive did not nature make an effort to arrest the activity of the inflammatory process by a diminution in the activity of the secretory functions of the small intestines, which no longer pour out such large quantities of vitiated secretions,

by a propagation of the inflammation to the muscular coat which when weakened by normal extension is powerful to keep them so distinctly confined. The mucous is in addition their mucous lining mixed with small hard lumps of faeces. The hard stools produce great distress straining particularly when the motions are dark colored mixed with blood, purulent matter with shreds of lymph. The inflammatory condition is often propagated to the bladder. As a result we have frequent micturition, high colored scalding urine great constitutional disturbance & prostration

Treatment. The removal of the predisposing and exciting causes under which the disease originates is all important. Care in cleanliness, perfect rest in bed, recumbent position since maintained, room well ventilated, prompt removal of putrid effluvia from the evacuations are indispensible. The diet should be restricted & indications met as they appear. Little medicine as possible, with good nursing & proper attendance to diet & hygiene most of the cases will get well

To the Faculty of the
Medical Department
of the
University of Maryland
Baltimore. U. S. A
A Thesis.

The Origin & Evolution of the Human Brain

By

C. Elson

Baltimore - Md.

February 7th 1883

Origin & Evolution of the Human Ovum

Each ovary at birth contains about 30,000 graafian follicles or primordial sacs which enclose an ovule.

These sacs are surrounded by a delicate & complex network of capillary blood vessels which by delicate bind tissue attachments unite each follicle together.

The outer coat of these sacs, which is formed from the stroma of the ovary, is named the "Tunica Fibrosa"; & it is lined by a closely fitting inner coat, or delicate membrane, named the "Ovisac" or graafian vesicle. Within this ovisac, & closely adherent to its inner wall, is another coat made up of several parallel layers of nucleated cells named the "Tunica Granulosa" which surrounds

a pale serous transparent fluid named the "liquor folliculi". This fluid fills the follicle of the ova, floating at the upper part where floats the human egg or "ovule", embedded in several layers supplied by the granular coat of the "tunica granulosa".

This human egg or "ovule" is composed of one membrane only which is perfectly globular in shape, or is named the "Vitelline membrane" or "Zona pellucida", which forms the only covering to the yolk or "vitellus". This yolk has no white around it, and within its mass lies the "germinal vesicle" which contains the "germinal-spot".

As the graafian follicles approach maturity they rise to the upper part of the ovary and that one, or several, which is perfectly ripe

penetrates the upper wall of the ovary (or "tunica albuginea"); but just before the ovule emerges, the graafian follicle & its other coats, ruptures, & the ovule escapes, surrounded by a mass of the "tunica granulosa" which is now called the "proligerous disk". It is quickly seized by the "fimbriae" or fingerlike processes of the fallopian tube; & conveyed thro' that tube into the cavity of the uterus.

This germ cell or ovule after its fecundation (which may take place either in the ovary, fallopian tube, or uterus) loses its "germinal spot" & "germinal vesicle," & possesses only its single vitelline membrane which now surrounds the yolk or "vitellus"

The first change which takes place within the vitelline membrane is the fission

of this yolk into two halves, then the subdivision of those halves into quarters; the quarters into eighths; the eighths into sixteenths & so on in repeating multiples until the "sac" is lovely filled with small, round, nucleated, transparent cells.

The next change is the arrangement of these cells within the sac. They pack themselves closely together, layer upon layer, until they have formed a level, smooth, lining wall inside of the sac or "vitelline membrane". Within this wall is a space filled with fluid; the residue of the unutilized yolk. Soon, this newly formed cell wall divides into 2 parallel layers: the outer one being named the "Epiblast" & the inner one the "Hypoblast".

The "Epiblast" develops ultimately into the skin, muscles, bones, nerves, blood vessels, sympathetic nervous system, connective tissue, the urinary & reproductive apparatus, & the walls of the alimentary canal.

The "Hypoblast" develops ultimately into the epithelial lining of the alimentary canal with its glandular appendages the liver & pancreas, & the epithelium of the respiratory tract.

Later, a third layer is formed between the above 2 layers, named "Mesoblast". This middle layer divides into 2 layers; the upper one uniting with the epiblast forms the "Somatopleure"; while the lower one unites with the hypoblast forms the "Splanchnopleure"; & the space between these

The last coats becomes the pleuroperitoneal cavity.

Now, at the top of the epiblast, but beneath the vitelline membrane, a broad oval elevated, granular ring appears, which is named the "area germinativa" while its central clear space is named "area pellucida". As this ring is oval in shape it will have both a long & a short diameter or axis, and in its long axis of the "area pellucida" a small trough or furrow appears, named the "primitive trace" - The sides of this furrow or "primitive trace" gradually rise & arch over the trough like they meet & to form a tube which ultimately becomes the spinal column & encloses the spinal cord. The sides of the trough which have thus

seen are named the "Laminae Dorsales" or dorsal plates.

On both sides of the "primitive trace" at the line of origin of the "laminae dorsales", and at right angles to it, a thickening of the epiblast appears, which gradually spreads downwards in the line of the descending wave of the ectoderm epiblast, for a short distance, & then turns inwards to meet in the median line the thickening process from the opposite side. These processes are named "laminae abdominales". The lower portions of these processes at their approaching edges dip obliquely into the yolk sac, cause a portion of it to bulge downwards & outside their compressing constriction & thus form the "umbilical vesicle" which ultimately disappears, while the

portion of the yolk sac enclosed within this cavity becomes the primitive alimentary canal. The thin neck or duct uniting this sac with the newly formed viscera is called the "**Vitelline** duct".

The evolution so far has completed the elementary basis of the bony skeleton & the viscera, excepting the arms & legs which are developed later.

From all sides of the embryo's body, at the line of constriction of the "lamina abdominalis", which pinched off the lower portion of the vitelline membrane containing the yolk, hollow folds of epiblast rise up, while the embryo sinks deeper into them, till these folds meet and unite upon its back, & after absorbing their septa, thus form a

double sac around it.

The outer sac is named the "External Amnion", & recedes on all sides from the inner one till it reaches the spherical walls of the investing membrane, when it descends along their sides as if to meet its approaching fellow, which it would do, but for the "umbilical vesicle" & its neck the "vitelline duct", and the comparatively developed "allantois" within the sac.-

The inner sac which closely surrounds the embryo forms the "Internal Amnion" or Amniotic cavity, & becomes filled with fluid which constitutes the liquor Amnii in which the foetus floats till its birth.

The Allantois arises from the abdomen at the side of the vitelline duct, & originates at the posterior portion of the alimentary canal

and lies between the folds of the external amnion by the side of the Vitelline membrane and its duct.

It spreads more rapidly than the external amnion, which is gradually approaching its converging folds to form another double sac, surrounds it, and meets its fellow convergent parts, which diverged in all directions at the bottom of the globe, over the external amnion, which it has now entirely surrounded, and unites above the back of the fœtus. It has now formed itself into a double sac, united by its neck only to the intestines, which becomes the future umbilical cord of the fœtus.

This 'Allantois' is supplied with blood

vessels from the iliac arteries by which the developing fœtus is supplied with nourishment till its birth.

This double sac named the "Allantois" possesses one membrane and then combines with the contiguous surfaces of the external "Amnion" which now lies within its embrace, and the innermost coat of the, the Vitelline membrane on its outside. These 3 membranes namely the "Amnion", "Allantois" and "Vitelline" membranes unite into one membrane and are called the "Chorion". ~~which ultimately becomes the true skin~~

This "Chorion", formed from the three above membranes, becomes covered over with external processes or villi, each of which encloses a capillary blood vessel

derived from the "Allantois". –
These villi, covered with epithelium cells, grow longer and send out from their extremities finger like branches, and when fully developed, are distributed over the whole surface from the "shaggy coat".

After the eighth week of fœtal life, all these villi, excepting one third of them, disappear, and this surface from which they have withdrawn is named "bald".

On the part of the "Chorion" at which the placenta will be formed the shaggy coat becomes greatly increased in density and length. –

The ovum, on its entrance into the uterus, rests between two of the folds

formed from the "decidua vera" which further hypertrophied mucous membrane of the uterus, and which becomes convoluted throughout the whole cavity, except at the orifices of the fallopian tubes and the os uteri, by the stimulating & congesting influence of conception.

These folds of mucous membrane surround the ovum, and make above it or at least below it in a bag; & the top or opening of this bag, is named the "Decidua Reflexa"; & the bottom and sides of it the "Decidua Vera".

This bag becomes very vascular and thickened, and the villi of the "Chorion"

penetrate its follicles like roots, and so forms at the bottom of it the "placenta".

The foetus is now surrounded by three membranes;- first, from the inside the "Amnion", then the "Chorion" and last the "Decidua Reflexa", and these membranes constitute the "Bag of Waters".-

The attachment of the "Placenta" is formed thus;- the villi of the "Chorion" contain within them loops of blood-vessels, and these villi thus applied themselves into the follicles of the "Decidua Serotina" which are surrounded by blood vessels from the uterus.-

At first the coats of the villi and the mucous coat of the "Decidua Serotina"

form septa between their blood-vessels, but now these septa become absorbed and the blood-vessels of the chorion villi and those of the "decidua vera" come closely in contact with each other and unite, grow very thin, but still retain their respective walls, so that the foetal and maternal bloods never mingle.

The blood sent to the villi by the foetal arteries returns by the foetal veins, and so with the maternal blood. The blood vessels of mother and child interlace with each other and thus form the vascular mass of the placenta, which is formed at about the seventh or eighth week of gestation, and at

full term it is a saucer shaped spongy mass about eight inches in width, varied in its central depth which gradually decreases towards its edges to the quarter of an inch in thickness. It weighs from sixteen to twenty ounces at birth. It arises from the umbilicus or navel and is the root of the "Allantois" which as before stated unites with the external Amion and the Vitellus - membrane to form the "Chorion". It is the only organ between the foetus and the mother by which Respiration, Nutrition and Excretion are performed.

The Umbilical cord or "funis" which unites the placenta to the foetus

appears at about the fifth month of pregnancy, and consists of two arteries which are continuations of the hypogastric arteries, and a single vein with no valve, enclosed or imbedded in a gelatinous mass named the "gelatin of Wharton", which is deposited in the cells of the connective tissue of the cord. There are at first two umbilical veins, but one of these becomes obliterated, so that the two umbilico-mesenteric arteries and veins, and the duct of the umbilical vesicle. The permanent structures of the cord are then furnished by the "Allantois". The umbilical arteries which at first were straight become tortuous, and twist around the vein. The cord

is covered externally by a layer of the "Chorion" and "Amnion".

The nourishment of the Embryo is at first derived from the vitelline or yolk, but as that becomes absorbed, it is supplied by the omphalomesenteric vessels of the umbilical vesicle, and then the Chorial villi replace the vessels and absorb nutrition from the vessels of the "Allantois" till lastly the placenta is the only medium for nutritive conveyance which persists up to the fœtus till its birth.

The fœtal circulation may be thus described:-

The Placenta receives the venous blood from the fœtus and returns

it reoxygenated and charged with nutritive material.

Nearly the whole of the blood of the umbilical vein traverses the liver before entering the inferior vena-cava.

The right auricle of the heart is the point of meeting of the double current; the blood in the inferior vena cava being guided by the Eustachian valve into the left auricle, whilst that in the superior vena cava descends into the right ventricle.

The blood carried from the placenta to the foetus by the umbilical vein, mixed with the blood from the inferior vena cava, passes almost

directly to the arch of the aorta, and is distributed by the branches of that vessel to the head & upper extremities; - hence the large size & perfect development of those parts at birth.

The blood contained in the descending aorta, chiefly derived from that which has already circulated through the head and limbs, together with a small quantity from the left ventricle, is distributed to the lower extremities; hence the small size and imperfect development of these parts at birth.

The Nervous system of the embryo is developed thus:-

The cerebro-spinal axis is formed

within the medullary canal by the development of cells from its inner surface, which ultimately increase & fill-up the canal, and there remains only the central canal of the cord.

The external surface gives rise to the dura-mater & pia-mater.

The neural canal thus formed is a tubular membrane; it terminates behind in an oval dilatation, and in front in a bulbous extremity, which soon becomes partially contracted and forms the anterior, middle & posterior cerebral vesicles, from which are ultimately developed the "cerebrum," the "corpora quadrigemina" & "medulla oblongata," respectively.

The Anterior vesicle soon subdivides

into two secondary vesicles, the larger of which becomes the hemispheres, the smaller, the optic thalami; — the posterior vesicle also divides into two; — the anterior becoming the cerebellum, the posterior the "pons varolii" and the medulla oblongata."

About the seventh week the straight chain of cerebral vesicles becomes curved from behind forward & forms three prominent angles. As development advances, the relative size of the encephalic masses changes. The cerebrum developing more rapidly than the posterior portion of the brain, soon grows backward and arches over the "optic thalami" and the "tubercles

quadrigemina"; the cerebellum covers the medulla oblongata.

The surface of the cerebral hemispheres is at first smooth, but at about the fourth month begins to be marked by the future fissures & convolutions.

Charles Ottenstein
Baltimore, Maryland.
U. S. A.

Feb 7th 1925.

Ethics
Lecture on Schiller
Prof.
W. C. Shelling
Lect.

Chap. of '53.

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Thesis,
for the degree of Doctor of Medicine,
respectfully submitted
to
the Dean and Faculty of Medicine,
of
University of Maryland,
by
George B. M. Free.
1883.

Whiskey.

Whiskey or Spiritus Frumenti of the Pharmacopœia is the spirit obtained from fermented grains by distillation. It consists of fifty-six per cent. of absolute alcohol in water together with various odorous principles and ethers which impart to it its peculiar physical properties.

Whiskey differs from brandy, which is also a solution of forty-eight to fifty-six per cent. of alcohol in water, by the absence of the wine-like odor and the hot astringent taste which characterize the latter. The species of grains most highly esteemed in this country for the distillation of whiskey are rye, bar-

ley, and corn although it may also be ob-
tained from wheat, buckwheat, oats and
potatoes as well as from all other vege-
table substances which consist mainly
of starch, each variety having some
peculiar or distinguishing characteristic. It is deemed preferable to use a
mixture of several sorts of grain in-
stead of a single one, e.g. rye with
corn and a small amount of bar-
ley malt is one of the most frequent
combinations. That obtained from rye,
together with a small quantity of malt,
on account of its comparatively mild
taste and odor, is considered the best
for medicinal purposes. The product
of spirit which these different grains

afford depends upon the proportion of starch which they contain.

The production of whisky rests depends on the simple fact that when any vinous fluid is boiled, the alcohol being very volatile evaporates first and may thereby be separated from the watery vegetable infusion which it took its birth.

The juices of sweet fruits contain a glutinous ingredient which acts as a ferment in causing their spontaneous change into a vinous condition; but the infusion of seeds as corn, rye, barley, etc., contain their fermentable or malted state, requires the addition of a glutinous substance

called yeast to excite the best fermentation.

The first step in the process of distillation consists of the mashing. The grain after being ground and to which is added about one third its quantity of crushed malt is poured into the mash tub. Then a sufficient quantity of water heated to about 150° F. is added to the ground grain and carefully incorporated, formerly by manual labor but now, especially in the larger distilleries, by mechanical contrivances. This agitation must be continued for two or three hours, with the addition from time to time of additional water at a temperature of

yeast. in order to counteract the
cooling of wort in. Before mixing
it with the fermenting tub the yeast
is skimmed and the whole mass cooled
by a cold tube and cold air. Then it
is run into the fermenting tubs
where it is left to ferment for a pe-
riod of at least forty-eight hours.

The malt from the diastase
contained in it exercises a most re-
markable influence upon the starch
transforming it into dextrin and sta-
rch sugar, so that in the course of a short
time, the flour, from being thick and
mealy, becomes comparatively thin
and sweet. If the wort, as it is call-
ed, be examined every half-hour of

[illegible] fermenting fluid, it will be found to become progressively sweeter to the taste during the distillation of spirits.

After remaining in the fermenter for the space of forty-eight hours it is pumped into the still where the distillation proceeds. Here it is heated by means of steam and, as the alcohol is more volatile than the other ingredients contained, it is first driven off. Condensation of this vapor is effected by surrounding the tube containing it with cold water. This tube, or condensing worm, as it is commonly called, consists of a metal pipe, usually copper, twisted into a spiral

[illegible] for the sake of compactness, and [illegible] [illegible] [illegible] [illegible] [illegible] so the end of the pipe may pass through [illegible] [illegible] [illegible] [illegible] [illegible]

water, fusel oil, and various other prin-
ciples begin to separate giving the
whiskey a "wild" taste and odor. When
the hydrometer indicates less than 90° a-
bove proof the whiskey should be turned
off and the remaining portion carried
over for the next distillation. The fusel
oil mentioned above is an impurity
existing in the whiskey in consequence
of the avidity of distillers in carry-
ing on the process after all the alco-
hol has been distilled over. This oil ex-
ists in a considerable quantity in whis-
key obtained from the sugar of pota-
to-starch. Not only does it occur nat-
urally in all whiskey but it is one
of the many ingredients which is

results about it.

Physiological Action. — The physiological effects, as well as the toxicological, of whiskey depend mainly upon the alcohol which it contains. The odor of the breath after its administration depends however not upon the alcohol but upon the presence of various ethers, fusel oil, etc, which the whiskey contains.

Whiskey, on being taken into the stomach causes a sense of warmth which diffuses over the abdomen, and if in considerable quantities, especially in persons not habituated to its use, is quickly followed by warmth of entire body. This warmth is usually only apparent as only a slight general rise of temperature

increased. If a large dose be taken the action of the heart and the cutaneous circulation increases and the phenomena of exhilaration, of excitement, and of intoxication ensue. A still larger quantity causes a loss of responsible power, impaired coordination of voluntary movements, and a rambling incoherence. The amounts necessary to produce these effects will depend mainly upon the per cent. of alcohol the whiskey contains and also upon the person whether he be one accustomed to its use or not. Habit, as in the case with a great many drugs, modifies in a remarkable manner the physiological activity of whiskey. Hence re-

ment that will be observed in an alcoholic will not be noticed in a toper.

Alcohol induces a superficial congestion of the mucous membrane and as gastric secretion is partially depend on vascular dilitation this increased blood supply excites the mucous follicles and the gastric glands to produce a more abundant secretion. Thus however the excitation of these glands is the first important change to take place under its influence so that instead of producing the normal secretion, they form out a pathological one.

The gastric glands at first simply produce an increased secretion

gastric juice as in stomach by the increased digestive power after small doses have been taken; but its repeated administration, causing abnormal stimulation, results in hypertrophy of the mucous follicles forming the so-called nipple-like protuberances, and in pathological changes in its secretion giving rise to the gastric catarrh of the habitual consumer.

Owing to its great diffusibility, on being taken into the cavity of the stomach, it passes by osmosis directly into the capillaries and so into the portal circulation, consequently not reaching the small intestines. After leaving the stomach the blood containing the nitro-

by passes through the portal vein
into the liver. As it reaches the portal blood more highly stimulating
it increases the functional activity
of the liver cells and, as is the case
in the stomach, a more abundant
glandular secretion follows. Engorgement
stimulation and secretion of the organ causes an enlargement of its
proper function, as is the universal
law. The connective tissue of the organ
gradually increases and the hepatic
cells are stimulated are subsequently
affected with fatty and atrophic changes
and shrink in size, thus producing
an obstruction to the flow circulation
through the portal capillaries and to

the passage of the bile through the bile ducts, and giving rise to all the results of portal congestion. On the kidney it acts as a similar irritant, and is the most frequent cause of Bright's disease.

On the heart in small stimulating doses it acts by increasing the force of its muscle. When in large narcotic doses the morbidized blood produces a lowered power of the vaso-motor process and as a consequence a dilitation of the blood vessels and, owing to the lessened resistance in the movement of the blood an undue rapidity of the heart's results. In prolonged toxic narcotism, the pulse is slow

and this, by the fact that the nervous
fibres are being fatigued.

On the nervous system it acts,
by first increasing the functional ac-
tivity of the brain; the ideas flow more
rapidly, the senses are more acute, the
muscular movements more active, and
the activity of the functions of the or-
ganism in general is increased. On its
action on the brain increases results
incoherence and crowding of ideas,
and incoordinate and unconstituted
muscular movements. Delirium tre-
mens is a morbid state of the nervous
system resulting from the abuse of
alcoholic liquors. Whether this is due to
the sudden withdrawal of the stimu-

ey, or whether it is a direct consequence of its long-continued action on the brain, is a mortal question. Perhaps both are correct although the latter must be by far the most frequent cause. Dr. Gibbons says he has never seen a case due to the sudden withdrawal of the whiskey but finds that it always comes in the midst of a drunk. Disorder of the nervous system no doubt is an important factor in the causation of this disease, yet certainly one of no less importance, perhaps more so is the quantity of whiskey which the person is in the habit of drinking and was drinking up to the time of the attack.

The long continued use of whiskey

[illegible] on the nervous system other [illegible] besides delirium tremens. On [illegible] of the [illegible] results from its [illegible] mental disease, or the system that [illegible] fever, has in the same agent an [illegible] power.

Remembering the fact that the administration of alcoholic stimulants may [illegible] life to those on the verge of death and that in many other states it is equally useful yet so great are the evil results of its use and abuse that Prof. Chew believes that it would have been far better for mankind had the art of distillation long since been irretrievably lost.

within the organism by far the greater part of the ingested whiskey is disposed of in the process of tissue change and yields up force which is applied as nervous, muscular, secretive, and nutritive force. When in excess of this equilibrating power of the organism it is eliminated by the various excretory organs as the lungs, skin, kidneys etc. It has also been found in the ventricles of the brain, having undergone no chemical change.

Whiskey is a useful food in the small quantity in which it increases but does not impair digestion and which quickens the circulation and the secretions without overstimulation and is a food upon which the organism may sick-

sist exclusively for a considerable period.

The physiological effects of whiskey differ in different conditions of system. In convalescence from acute disease, in the sudden depression caused by the bites of venomous reptiles or from injury and loss of blood, quantities which in health would produce profound narcotism, may be taken with impunity.

Therapeutical Uses.- Whiskey itself has little or no curative power, its use in medicine being either as a stimulant to sustain the vital powers until other remedies shall have aided in a cure or until the disease has run its course as in the self limited diseases, and as a food. It is given to counteract the in-

fluence of such depressing agents as aconite, digitalis, veratrum viride &c. and is called for in cases of extreme and sudden depression as after crushing injuries, in very severe burns, and in threatening syncope. It is the principle agent given to persons bitten by venemous snakes. Its action here is not as an antidote or as antagonistic to the poison but as a stimulant to the heart's action, and, on account of the counteracting impression of the poison upon the system, large amounts may be given without intoxication ensuing.

As a food it is constantly prescribed in low fevers, acute inflammations, and all diseases in which there is a rapid

tissue changes. It is useful in these conditions when oxidation is going on too slowly and lacking of any special antiphlogistic power which it does not possess, but because it yields oxygen and hydrogen as fuel for the combustion which takes place under the diseases of life force.

Owing to the great prostration attendant upon the malignant forms of certain diseases as varicella, scarlet-fever, diphtheria, &c its use is absolutely necessary early in the attack.

Whiskey as it tends to retard tissue metamorphosis and to increase the digestive power and favor the deposition of fat, is indicated in the treat-

result of chronic debility. If it disagrees, i.e. if it lessens the appetite it will be worse in phthisis. It may be given with food, also with or, as is frequently done, with some bitter, in one or two tablespoonfuls, just before each meal.

Whiskey is sometimes given hypodermically, when, for example, from threatening hemorrhage, life is endangered by prostration not reached by stimulants administered by the mouth or rectum. It is also given hypodermically before surgical operations to lessen shock and the danger of hemorrhage.

In prescribing whiskey or any other alcoholic liquor in chronic diseases the physician should never lose sight

of the first dose a craving for stimulant excitation is often easily induced. Dyspeptic disorder, mental depression, or a sense of prostration incident to various diseases and sometimes a constitutional idiosyncrasy, may form an important factor in its producing such a habit. The original dose as the system becomes habituated to its use becomes too small and it must necessarily be increased; this habit the temptation to which is doubled by the relief it affords in such diseases as chronic neuralgia and in melancholia will almost of necessity grow into drunkenness. In the latter stages of consumption, however, its

i. licious use as an antipyretic and cotic stimulant to lessen the suffering of the patient is perfectly justifiable.

In conclusion I must again reiterate that one great care of the physician in case requiring the use of stimulants for any considerable length of time, should be to avoid creating in the patient a craving for their habitual use — a habit far worse in its results than the disease or even death itself.

Thesis.
Diphtheria
by
J. F. Hebrank Pa.

Class of 1883.

Diphtheria.

Definition: An acute systemic disease, affecting the mucous membrane of the air passages generally, although it may appear wherever mucous surfaces exist or any part denuded of skin.

It is a disease of antiquity, dating back as far as the commencement of the Christian Era.

Nature of diphtheria: It resembles scarlet fever in certain particulars; in its incubative period, in its variability of type from a very mild to a malignant form. in the common seat of its inflammation, namely, upon the fauces and nasal

passages, in the profound blood-poisoning and prostration in the severe cases and in the frequent occurrence of nephritis as a complication. It resembles both scarlet fever and small-pox in the fact that it is communicable both through the atmosphere and by contact. It resembles erysipelas in the variableness of its duration and in the fact that one attack does not protect from another. In its etiology it resembles typhoid fever, for it is not only communicable from person to person but it is produced by foul exhalations, as does yes, but while there are certain resemblances, it is distinguished from

are these infectious diseases by marked peculiarities (Smith).

The microscope in the hands of various scientists, has revealed that in all tissues that are the seat of diphtheritic inflammation and in the pseudo-membrane, the presence of spherical bacteria in immense numbers, with a smaller number of other kind, the bacteria being severe in proportion to the number.

It attacks indiscriminately rich and poor, the well fed and poorly nourished, without regard to locality, except that a porous soil, with an understratum of clay, appears to favor its development. Bad hygienic conditions

of necessity provoke its virulence by lowering vitality

Pathologyy Early in the disease there can be observed redness of some portion of the mucous surface. In most cases it is the faucial mucous membrane that is affected, generally on the tonsils, but if there be a pre existing inflammation of any other mucous surface, or a portion of vehicle denuded of its epidermis and inflamed, the specific inflammation is apt to appear upon such parts, with or without its simultaneous appearance upon the faucial mucous membrane,

The inflamed surface is sometimes a

deep, bright, red color, almost like arterial blood, in others it is a dusky red, which indicates a vitiated state of the blood, the latter being more common in accompanying them in primary diphtheria.

Generally within a few hours from the time the inflammation begins a small slightly raised patch is observed. This patch termed the pseudo-membrane, gradually becomes firmer, thicker and broader from fresh exudation underneath, its color being grayish, grayish white. It is usually about one tenth to a sixth of an inch thick, though it is sometimes much thicker.

By the aid of the microscope may be

seen numerous micrococci and bacteria, which may be traced through the sub-epithelial tissue.

When fully developed the pseudo-membranous exudation has the gross appearance of a false plastic membrane. The membrane may consist of several layers, and often is stratified. At this point the attachments are very strong, so that if the membrane or portions of it be detached slight hemorrhage will ensue, or numerous minute bloody points will be seen upon the sub-jacent mucous membrane. When the inflammation is at its height, it is astonishing to see how rapidly the

pseudo membrane will be reformed, frequently when removed by force.

The consistence of the deposit varies a great deal, some being firm, tenacious and elastic, others being less firm or even pultaceous.

The subjacent mucous membrane is much congested and swollen, with a vascularized and roughened surface, its epithelium being removed, and sometimes presents spots of ecchymosis, although these may be the most usual conditions of the mucous membrane, it is certain that in some cases there is ulceration and slough ulceration and even gangrene occurs. In mild cases of diphtheria

in which the pseudo-membrane is small and superficial, penetrating but little the mucous membrane in which it is imbedded, there is little danger of septic poisoning, but in those cases in which the membrane is tenacious and deeply imbedded in the mucous membrane, so that the the lymphatics and blood vessels are in immediate relation with its under surface the danger is great.
As soon as decomposition begins absorption of the poisonous substances produces inflammation of the lymphatic vessels along which it passes, and lymphatic ~~vessels~~ glands which these vessels enter. The adenitis also

gives rise to inflammation of the periglandular connective tissue, so that the neck is thickened, hard and tender.

If a gland be examined which is swollen and inflamed by the toxic absorption, we will find that its bloodvessels are congested, and that its cells have undergone hyperplasia.

Bronchitis occurs in some cases, some of which the inflammation is pseudo membranous, especially in the larger tubes while in others it is catarrhal.

The muscular fibres of the heart in diphtheria are liable to granulo fatty degeneration, so that they

become softer. This degeneration is observed only in a certain proportion of the more malignant cases and is far from being universal.

The kidneys are the most frequently affected of all the internal organs, as is shown by the common occurrence of albuminuria, haemorrhagic nephritis, with the characteristic hyperaemia and swelling, is the result from the fulminating disease which complicates diphtheria.

In the albuminous urine are found hyaline and granular casts.

This complication may begin as early as the first or second day, but

ordinarily it does not commence until the close of first week, or in the beginning of second week.
Substitial syphilis also complicates certain cases.

Symptoms

The prominent symptoms are not always proportionate to the gravity of the attack.
The initial symptoms are chilliness or rigors, often slight, succeeded by febrile reaction, languor, headache, more or less severe, pain in the limbs or back, and impaired appetite. The symptoms of invasion have less prognostic value in

diphtheria than in most other infectious diseases, there bring cases, which are attended in the beginning by delirium &c, which terminate in recovery within a week. On the other hand, a mild commencement sometimes ushers in a fatal form of the disease.

The fever which ushers in diphtheria abates after the second or third day, after which time there may be but little or no elevation of temperature;

The tongue is usually moist and slightly furred.

The patient often vomits in the commencement, which is not a grave

sign, if it be not very frequent.
Repugnance to food characterizes most of the graver cases.
The stools usually appear normal except as they are changed by medicines.
The onset frequently is very insidious, so that our attention may not be called to the throat by any complaint of the patient, even when a considerable amount of exudation is already present.
If the throat be examined on the first day of the disease, the exudation may often be found even at that time, though often not found until the second day.

The fauces generally burnt slight
redness and redness prior to the
appearance of the false membrane,
which almost always shows itself
first on one of the tonsils only, in
the form of whitish spots, like
agglutinated mucus, which run together
and extend over the whole gland,
and then to the soft palate and
pharynx, though it sometimes re-
mains limited to the tonsils and
soft palate. After a while the
membrane becomes firmer in con-
sistence, thicker and changes from
white to yellowish white or grayish
color. The breath now becomes very
offensive and there is but little sal-

ration.

If the case is a favorable one, and the disease is left to pursue its own course, the pseudo-membrane becomes thinner, assumes a grayish tint, and falls off about the sixth or seventh day, but if the case is a more violent one, the pseudo membrane about the time it begins to be detached, assumes a grayish or bluish color, and hangs in shreds from the surface to which it had been attached. The fauces presenting a gangrenous aspect, the mucous membrane looks as though it were falling off in shreds; the breath is

very frequent and abundant tubercles.

The lymphatic glands are almost always enlarged and painful to the touch, also the surrounding cellular tissue shares in the inflammation, so that the swelling often becomes very great, impeding the movement of the jaw, it being nearly as hard and painful as the corresponding swelling in parotitis.

The respiratory apparatus is not involved in the benign cases in which only the fauces are inflamed but not in the fauces, the Schneiderian membrane is most fre-

generally affected of all the surfaces and when the nares are inflamed and covered to a greater or less extent by the pseudo membrane there is more or less discharge, which may excoriate the upper lip and cause incrustation around the entrance of the nostrils, making respiration through the nose difficult.

Deglutition is generally painful and difficult, at times, attempts at swallowing fluids is by coughing and return of fluids through the nostrils.

Violent coughing, following attempts at swallowing usually indicates that the epiglottis is in-

glottis and is the seat of fibro-membranous exudation, which interferes with its movements, and thus allows the fluid to pass into the larynx.

If the urine be examined, at the close of the first week or in the second week, albumen will be found in a large number of more cases. The albuminuria, unlike that of scarlet fever, seldom occurs except in the most grave cases.

In most cases of albuminuria, casts usually granular, but sometimes hyaline are observed. In cases of albuminuria which recover, there is

are comparatively free casts, or some while in those in which the albumen is abundant and casts plentiful the termination is usually fatal. The urine, ordinarily has nearly the natural appearance, instead of the hazy or smoky appearance so common in the albuminous urine of scarlet fever.

Heart clots may form and give rise to alarming or fatal symptoms.

Pleurisy which usually occurs during convalescence in the second or third week after the abatement of inflammatory symptoms, may begin as early as the

the second or third day from the beginning.

The muscles most frequently affected by the paralysis are those of the pharynx and upper part of the larynx, but all muscles, both voluntary and involuntary are liable to be paralyzed. The great majority of those affected with paralysis recover in the course of a month or two.

Incubation: It is with great difficulty that the period of incubation can be fixed, although it is generally given as being about

three or four days. J. Lewis Smith fixes it at any time between two and eight days, with exceptional cases outside of these limits.

Causes:- It is both a contagious and infectious disease, may occur primarily or secondarily.

Temperature has but little effect, the moist, cold weather preceding the winter appears to be most favorable to its occurrence.

Diathesis appears to make but little or no difference.

Age unquestionably exerts a very strong predisposing influence, as a large majority of all recorded

cases occurred between the ages of one and eight years. The child at its mother's breast rarely suffers from an attack of diphtheria. Hiers & Pepper say: "Of the 1304 cases in our table, 190 occurred under the age of one year; 335 occurred between one and two years; 725 between two and five years and 35-5 between five and ten years, although the liability thus diminishes in an uncertain ratio with advancing years, no age is entirely exempt from it". However, it may be said that diphtheria is preeminently a disease of childhood.

Diagnosis.

In most cases the diagnosis is readily made when the disease has continued for some hours, for then the characteristic pseudo-membranous deposit, which is pathognomonic, is observed upon the fauces.

It may be rendered difficult to diagnose by a disease called Faucial Erysipelas, since both are very severe but faucial erysipelas is unlike diphtheria, in that with the former we have no dysphagia, no enlargement of cervical glands, no false membrane and its infrequency.

It is distinguished from Scarlet

fever by absence of eruption, absence of "strawberry tongue" and desquamation of cuticle. The exudation may repeat itself in diphtheria but in scarlet fever it only occurs during the stage of invasion. Often the diagnosis is made clear by the history of the patient, he having been exposed to the contagious and infectious influence of diphtheria.

Prognosis.

The prognosis is usually grave, especially under the age of three years. The uncertainty of prognosis is largely due to the fact

that diphtheria terminates fatally in several distinct ways. Namely, diphtheritic blood-poisoning, probably from septic blood-poisoning produced by absorption from under surface of decomposing pseudo-membrane. Obstruction of the larynx. Sudden failure of heart's action. or suddenly developed passive congestion of the lungs.
Repugnance to food, very obstinate vomiting, pallid countenance, weakness and emaciation from blood poisoning, a large amount of albumen and casts in the urine are all symptoms that point to a fatal termination.

Treatment.

The first, and one of the most essential things to be done in the way of treatment, is to isolate the patient, and should be insisted upon.

As to the remedies (medicines) to be employed there is a great difference of opinion among practitioners, one thing, however, is certain, that is, that there is no known specific for diphtheria, in the sense in which quinia is a specific for malarial diseases, and not much probability of its discovery.

Acceptance of the germ theory, of course leads to the employment

of germicide medicines, or the so called antiseptics, which have not seemed to have much effect in controlling the disease.

The most satisfactory results are obtained from the combination of both local and general treatment. The following is that which appears to give the best results and is sanctioned by the majority of leading medical minds.

The General Treatment may be considered under the three heads foods, stimulants and tonics.

Beef-tea, milk and farinaceous food &c. should be administered every

two or three hours, freely, without overtaxing the digestive organs, for every practitioner of experience knows how how very essential it is that the patients, as far as possible, retain their flesh and strength.
In mild forms of diphtheria, when no complications exist, the cases usually terminate ~~fatally~~ favorably without the use of any stimulants, but there are many cases, on the other hand, characterized by pallor of surface, marked weakness of circulation tendency to prostration, great enlargement of the cervical glands and extensive disease of the throat, accompanied

by loss of strength, flesh and appetite, indicating danger from diphtheritic or septic infection, in which stimulants freely administered, are positively required.

Again, all physicians who are familiar with diphtheria have noticed the pallor, loss of appetite and strength which commence before the close of the first week, when the use of Iron is at once suggested as the proper remedy to arrest this blood change.

The tincture of the chloride of iron is the form commonly used, in large and frequent doses.

Chlorate of potassium, which

exerts such a curative action on all bucal and pharyngeal inflammations (as stomatitis &c) may be combined with iron.

The following will be found to be a useful prescription.

℞. Tr. ferri chloridi ʒ ij
Potass. chlorat. ʒ j
Syr. simp. ℥ iv

Dose. one teaspoonful every two hours for a child 3 years old.

or

℞. Tr ferri chlor. ʒ ij
Potass chlorat. ʒ j
Glycerinae ℥ ss
Aqua q.s. ad. ℥ iij ss

Sig. ʒ j every hour or two.

or the following will be found

I find a very useful prescription

℞ Quinin Mur. gr X

Soda Mur ʒij

Aq. pura dilut. ℥j

Syr. Simplex ʒXV

Sig. ʒj every 3 hours.

If much fever exists Quinin should be given in sufficient quantity to keep the temperature within bounds

If the bowels be constipated a mild laxative should be given.

Lately diphtheria has been treated by a great many practioners with Mercury and it is claimed with a marked degree of success. Large doses being given frequently. 32 to 40 and

from 6 to 12 grains of the tincture chloride being given to a child every 3 or 4 hours. It is not known positively in what way it exerts its influence for good. It can be given alone or in combination with the tr. of the chloride of iron and chlorate of potassium.

The Local Treatment should have for its aim the destruction of the diphtheritic poison, and to prevent the absorption of septic poison, if any form. Care must be taken in applying substances to the parts, so that the pseudo membrane is not forcibly removed. Therefore, a sponge or other hard substances should not be used in making local applications

as they are likely to do harm.
The best mode of applying most mixtures employed is by the use of the hand atomizer.
Plain lime water is one of the best solvents of the pseudo-membrane known, and can be used as a gargle or as a spray.
Carbolic Acid is also a very destructive agent to the pseudo membrane.
The following mixture may be employed ℞. Acid. Carbolic, ʒss
Aqua Calcis ℥viij
The atomizer should be employed every one or two hours.
In most cases of diphtheritic inflammation of the fauces the foregoing will suffice

for the local treatment, but the following mixture, says Smith, applied by a large camel's hair pencil is very efficient in converting, immediately, the pseudo-membrane into an inert mass, and putting a stop to all movements of the bacteria which swarm in it.

℞.

Acid. Carbolic. gr x
Liq. Ferri Subsulphat. ʒj
Glycerine ℥iij

J. F. Hebrank

Project
Entrance Fees
Permittal -
Dec 7/83
F. B. Goodstaugh

Enteric fever

To the Faculty of [illegible]

Gentlemen

Wherein [illegible] ations of the general course of [illegible] of Typhoid fever, according to the diagnosis the constitution [illegible] with pathological ob- [illegible] ons of two fatal [illegible].

Enteric fever as I think a [illegible] term is an acute specific [illegible] fever [illegible] with a peculiar [illegible] on the [illegible] d disease of the [illegible] ed

glands of the intestines. The period of incubation is about a fortnight. Symptoms.- Sometimes the disease sets in quite severe, that is the congestion sometimes manifest themselves; but these are most significant, loss of muscular power in heat of the skin, as shown by thermometer under axilla or tongue. And it is important to be aware, such cases may have fatal suddenly in third or fourth week, and that such a case will be serious to be treated with the same care and precaution that we should give to the form manifesting any or all of the more alarming symptoms.

should commence. The first in importance and the often fatal accident is hæmorrhage, it may be slight or severe. Sometimes so slight that the patient or the patients attendants will not mention it unless ask if it occurs; but the symptom is found in the adult, indolent frontal headache; and numbness throughout, with hot skin and quick pulse. The motions are pasty in character with an offensive smell. The tongue is dry, red at the tip, and fissured. The urine scanty and high coloured. The bladder is retained, and it may be a fall

without affecting the heart & cause, or without affording any concentration that the patient is better or worse. Between the eighth & twelfth day of the disease careful search will reveal the eruption. This is found consisted of lose or [illegible] spots, elevated slightly above the skin, discoloration or redness. Greatest than last from two to five days, when it disappears, while fresh ones keep coming out. The spots seem upon the face, chest & arms, and I found the number varying considerably, nor did the number happen had any thing of the severity of the attack.

Severe symptoms of non-febrile manifesting themselves, severe vomiting, bilious evacuations accompanied with tenderness over the abdomen, particularly over the right side & hence, where gurgling may also be heard, & finally the abdomen tympanitic. The face bore marks of anxiety, & after a few days slight hacking cough, with some dyspnoea and hardness of breathing. Auscultation may reveal Bronchitis or Pneumonia. Diarrhoea occasionally recurred, and in one case the same died, the body after dying manifest in character. The symptoms

generally I found improvement in the third week and the patient become better, or the disease goes on. and may terminate in exhaustion or hemorrhage from the bowels. or perforation of the bowels owing to the disease in the patches of Peyer. When the bowels suddenly become re-duplicat in character in third week especially with tenderness and distention of abdomen where the proper precautions were not taken to prevent we had hemorrhage. And I did not find it in one case until after the fourth week. But perforation may occur up to the sixth week. I also found muscular

before fever. Dose of
tincture not of indication to the re-
medium is a grave responsible.
Again I think that a pulse of
130 per minute are a grave sign.
Again I believe if headache and de-
lirium coexist we may expect cer-
ebral complications. Pneumonia
Pneumonia I found frequent complica-
tions, and in one case had
now the active inflammation of lungs
was excited. The case being of
developing tuberculosis before the at-
tack of fever. In a fatal case of
pneumonia the symptoms preceding
it were, some cough of distress,
with tiredness, and vomiting,
when a sudden paroxysm

a central abdominal pain indicated to the point that recovered.

The pattern of eruption.

Peyer glands were found in every stage of inflammation. Hence the distinct swelling to the second from of ulceration & sloughing. & from the more distinct one change situated nearest the caecal valve. The mesenteric glands were congested and softened and swollen. Spleen and liver were enlarged and softened

Diagnosis

From typhus the absence of which the causes were found.

From remittent fever by the

absence of vomiting in the beginning, and the absence of paleness of skin. The slower insidious more protracted course, mental dullness, and drowsiness are the abdominal symptoms.

Treatment

Of foremost importance is to place if possible the patient in a large well ventilated room. The proper precautions against infection should be practiced. Then great cleanliness will be necessary all stools and secretions removed and disinfected by Condy's fluid or carbolic acid. The diet will require at first to be liquid

digestible nourishing in most cases. Such as beef tea, veal tea and chicken broth. The strength must be closely watched and stimulants be prescribed. Light puddings and milk may be allowed. The use of wine requires caution and restriction if the patient is doing well during the first three weeks of the disease; but if towards the latter part of the disease there is marked exhaustion it is necessary to get the patient through the disease. Chorea and muscular tremor are symptoms calling for stimulants, and again evident-

happiness of heart return is an indication of its improvement. But I believe if there is any doubt as to the propriety of giving a stimulant, it is better not to give it. As to medicine purgatives are to be avoided. In exceptional conditions inter-atively called for small doses of castor oil will be the safest & best medicant. I found it often necessary to check diarrhoea, for this purpose mild doses of chalk and red gum, sulphuric acid and opium. An enema of starch and opium, also Ergot and Turpentine, may be employed

Then I found covering the abdomen with warm moist flannel well sprinkled with turpentine acted advantageously. For symptoms of cerebral congestion head must be shaved and cold applied. Bleeding is generally inadmissible. Turpentine I found the best remedy for tympanitis. I found hemorrhage not necessarily fatal. it should be treated with astringents. and should perforation occur I should be tempted to not entirely lock up the bowels, as one fatal case I saw the bowels were locked up and the patient apparently

not a single died on second day after perforation. When symptoms of Pneumonia arose mustard Epithems and turpentine stupes were successfully employed. Bronchitis generally required stimulating expectorants as the phlegm was generally tenacious and copy. During convalescence I found the diet should be carefully attended to as I found errors in diet not only bring back diarrhea but in one case prove fatal. And in country practice it is harder work to impress this upon the friends than it is to treat the case of fever.

I would say a word of the tub bath. I positively would not use the tub bath. For I saw a death occur only five minutes after its use by one of its advocates. I would advise in cases requiring it use the tepid sponge bath, from which nothing can come but good in cases requiring its use,

Yours truly
F. B. Sonderbaugh

F. P. Wilberforce

Thesis

on

Thrombosis of Portal Vein

by

Philipp Heldrich

Germany

February, 1882.

Although the occlusion of the Vena Porta is most frequently brought on by the coagulation of blood, it is also caused by other morbid processes, for instance by compression on part of pathological tissue, by the intrusion of cancerous substance into their lumen etc.

Thrombosis of Vena porta is not infrequently the result of inflammation of the walls of the blood vessel far more frequently however the former is the cause of the latter. Occasionally, especially in cases far advanced, I think it becomes difficult to ascertain, whether the thrombosis or the Phlebitis has been the

primary lesion. But most of the older cases of this kind are not so distinct and fully described, so that one could come to a definite conclusion concerning the relative dependence of the inflammation of the wall of the vein and the thrombosis itself.

Etiology.

Stasis in the portal arterial system may arise, as in other thromboses.

I. In consequence of debility of the heart action, occasioned by disease. This occurs generally shortly before death or during a long continued agony and is at the same

times accompanied by Thrombosis in other Veins or in the heart itself. Dr. Frerichs observed this in one case of Thrombosis in the portal artery as a globular vegetation between the parts of the left auricuło-ventricular valve with thrombosis of Vena jugularis, subclavia sinistra and vena hepatica and in an other case Dr. West found a thrombosis in the Vena cava inferior, besides the one in the Portal (artery) vein.

II. In consequence of Compression exerted upon the branches of the Liver or on the trunk of the portal artery and their capillaries, this comparatively is the most frequent

causation – it is brought on by the following conditions

a.) By the various diseases of the Liver, which destroy numerous capillaries and more or less contract or totally occlude branches of the Vena porta. Simple or granulated induration, especially, Cirrhosis, Syphilis and chronic Atrophy of the Liver in advanced stages give rise to Thrombosis in the portal vein.

b.) By the various sorts of tumors of and on the Liver, which more or less contract the trunk of the portal vein or its main branches or the central termination

of venae lineales or superior mesenteric vein. This is the cause of the majority of cases Thrombosis but not of all. According to Virchow, Rokitanski, Cohnheim & Rindfleisch the tumors pressing on the trunk of portal vein are those of the cancerous, lymphatic, sarcomatous, cheesy, tubercular kind and leucaemic tumefactions at the porta hepatis, especially in the lig. hepato-duoden. and in the corresponding posterior space of the peritoneum, then also gallstones cleft in among the Carcinoma of the Stomach, Pancreas and Duodenum.

III. A Thrombosis of the portal vein on its trunk and its two main branches is sometimes caused in the following manner – a thrombosis is formed in the termination of a minute portal arteriole, in some way or other this then extends into the main trunk of the portal vein by the formation of sediments of new coagulations and blood clots. This form of thrombosis according some authors is generally of a suppurative character. Adhaesive Phlebitis of the larger branches of the portal vein, which are contained within the liver, is the

cause of lobulated liver according to Rokitanski. According to Virchow however, this is able to be traced to syphilitic and irregular interstitial hepatitis most frequently - excepting congenital lobulation of the Liver - rupture sometimes found in the branches of the portal vein is to be designated as a secondary process, while obliteration of this vessel is certainly a process previous to atrophy. The occlusion of branches of the portal vein being in some cases introduced by coagulations that have minigrated into them, these the result of continued intermi-

tents

in addition to other morbid conditions, such as tumors of the spleen, this circumstance may possibly be the cause of such processes of obliteration.

As it is known at present that a long continued malarious disease may produce a diffuse interstitial Hepatitis, which presents the appearances of an atrophied or hypertrophic cirrhosis of the Liver; it would not be difficult to suppose that occasionally a circumscribed form of chronic Hepatitis may arise under the influence of Malaria; in this case the lesion would be similar to a syphilitic one, without exactly

provoking gummata like new growth however, and the obliteration of the portal vein branches would then be secondary. Although Thrombosis may frequently appear as resulting from Phlebitis, they generally have their origin in the suppurative Phlebitis. One case of Thrombosis of the trunk of the portal vein, I myself observed; it was consequent upon a tumor as large as a fist on the superior margin of the Pancreas and resulting from an external injury.

Pathalogical Anatomy.

The anatomical changes appearing in Thrombosis and adhaesive Phlebitis do not present any marked differences

from those of simple Thrombosis and Phlebitis. The fresh rapidly formed Thrombus, is of a bloody red color, soft, moist, homogeneous, very indistinctly stratified and not adhaerend to the wall of the bloodvessel. The slowly formed Thrombus presents a stratified appearance; Red and white layers consisting of fibres and white bloodcorpuscles are alternately arranged in such coagulations. As long as the Thrombus is fresh it is soft and moist, after some time however it becomes dry & more brittle. Its strata gradually become dissolved first becoming brown and later of a yellowish gray color. At this period there occurs a central necrosis,

in which the Thrombus acquires a compact cheesy consistence in the centre — this necrosis rarely starts at the liver branches of the portal vein, which would change these respective vessels into compact, solid strings. The Thrombus of Vena Porta is generally one which obstructs the entire lumen of this vessel. The terminations ordinarely pass over into clots that have more recently been formed, of a more loose and spongy consistence and gradually disapearing in the liquid blood; The termination turned towards the Liver and of older Thrombi is rarely formed semisphericial or conical. The Thrombus is either con-

fined

to the branches of the Liver or its roots, rarely to the Main-trunks alone. Frequently the branches of the Vena porta or the terminations of this vessel or even the two other ends are found to be occluded by a thrombus of greater or less extent. If the thrombus is not confined to the terminations of the portal vein then the main trunk is more or less expanded. The walls of the portal vein are not changed to any considerable extent in new cases, in older cases however signs of a more or less advanced chronic Phlebitis are presented. The intima becomes tarnished, turbid brittle and of a dirty grayish yellow color. The adventitia becomes

thicker, very vascular, in very old cases it may result in hypertrophy of connective tissue, also in fatty degeneration, occassionally even in calcareous degeneration of the veins. According to different etiological instants, we find different peculiar characteristics in Thrombosis of the portal vein. Thus in the Thrombosis, as this usually appears shortly before death or during a long continued agony, the Thrombus is generally fresh and the consequent signs incompletely developed, in such a case not only the main trunk, but also the branches and the larger terminations of the portal vein are found to be occluded by Thrombosis, and

not rarely Thrombi make their appearance in other vessels. Thus Thrombosis of the Vena porta in Cirrhosis, chronic atrophy and syphilitic inflammation of the Liver, is not only confined to a few single branches, but appears to be extended over branches and the main arm of the trunk of the vessel. The latter itself is expanded and enlarged and the walls in a condition of a more or less advanced chronic inflammation. Under these circumstances authors claim to have frequently found lamina of bone in form of fine scales or larger circularly formed lamellae in the lumen of the portal vein. Cases of Thrombosis of Vena porta as resulting

from Cirrhosis of the Liver have been published by many known Pathologists. In case of Cancer of the Liver the Thrombosis is mostly confined to single branches of the vessel, those which are compressed by the Carcinoma, in this case the fatal coagulation rarely expands. — The constriction and occlusion of the main trunk and of the central termination of the large radicals of the portal vein, produces a damming up of blood in the region enclosing the minute radicals, in the latter, and after a lapse of time it leads to the development of collateral circulation & finally it may lead to certain anatomical changes in the structure of the

Liver, owing to insufficient bloodsupply to this organ. Consequent upon a damming up of blood in the radicals of the portal vein, there may result a varicose dilatation of the latter vessel, accompagnied by hyperaemia and Catarrh of the Stomach and of the mucous membranes of the intestines - also hemorrhages in the latter and on their surface - frequently even Ascites and swelling of the Spleen. If the occlusion of the main trunk and the branches of the portal vein occurs suddenly, then a fatal termination will ensue, rapidly in consequence upon hemorrhages from the Stomach and intestines, perhaps also consequent upon surcharging

the blood with products of the gall, since there does not seem to be sufficient time for the formation of collateral circulation. If the occlusion progresses slowly it may give rise to Thrombosis, which according to the magnitude of its extension may more or less diminish the symptoms of the damming up of the blood or even not allow the latter processes to take place at all.
The character of the collateral circulation will differ according to the circumstance wether the capillaries and smaller branchings or the main trunk and larger branches of the portal vein are occluded. If the former is the condition, the collateral circulation will be as in

cirrhosis of the Liver. If the main trunk and the larger branches of the portal vein are obstructed, the collateral circulation occurs in the same manner, except that the umbilical vein which terminates in the left branch of the portal vein, can not be employed for this purpose, because, even if this left branch of the portal vein were not occluded, but the thrombosis on closing up the main trunk - the pressure in this branch would be far less than under normal circumstances.

At an occlusion of the Portal vein and its larger branches the function of the Liver does not cease, it is only more or less injured. This is explained by

two conditions, first, that the arterial blood is used by the liver in performing its function, and secondarly, that in this proposed case the liver would be supplied through the accessory veins of Sappey with a certain number of interstitial veins and with blood from the radicals of portal vein. The veins of Sappey form the following groups: I Group in the gastro hepatic ligament arises at the greater curvature of the stomach and terminates in the lobules, in front and behind the transverse fissure of the Liver. II Group consists of small veins which arise in the base of the gallbladder and enter into the substance of the liver at the margin

of the depression for the gallbladder — these anastomose with two veins of the gallbladder which terminate in the right branch of the portal vein. III group comprises those minute veins which have their origin in the capsule of Glisson in the walls of the hepatic artery of the portal vein and in the gall-ducts, these decide and bifurcate in the subjacent lobules of the liver. The IV group consist of fine branches which are situated in the suspensory ligament and constitute the communications between the structures of the liver and the omentum. The V group is composed of several very small veins which have their origin in that part of

of the linea alba which is situated above the umbilicus – one of them is somewhat larger than the rest and runs along the attachement of the suspensory ligament to the left longitudinal fissure of the Liver and contains valves which are turned towards this organ. Two or three others are situated in the range of the obliterated umbilical vein, one of these terminates in the left branch of the portal vein. This accessory branches of the portal vein is known under the name of the Vena peri-umbilicalis – Now if the main trunk of the portal vein is occluded, the bloodpressure in its branches is reduced considerably and a different

supply of blood is conducted through the accessory veins to the liver, by means of the radicals of the portal vein now under an increased pressure; as well as by means of the branchings of the Vena cava system. This afflux of blood of the portal vein occurs through veins, which to the greater part are identical with the first group of Sappey's veins. These are the several veins of the gallbladder, which on the one hand enter into the portal vein immediatly at the point where this enters the substance of the Liver, and on the other they stand in connection, by numerous delicate anastomoses, with the main trunks veins

of the gall structures and with those veins which enter into the vena gastrica according Heschel occasionaly enters into the branch of the portal vein which supplies the left lobe of the liver. This organ itself appears anaemic and weak in case of rapid obliteration of the portal vein, after this condition has existed for some time the liver is found diminished in size, anaemic, resisting and tough, the surface may be smooth or granulated according to the circumstance wether the organ is in a state of chronic atrophy or even atrophied cirrhosis of Liver.

Now while the majority of physicians

accept that Thrombosis of the portal vein when in connection with the just named morbid processes, it is the result of these, yet there are others who assert that the condition of circumstances may be reversed and that we may have by hypertrophy of connective tissue in the liver, as the result of vena porta occlusions. This view has however not yet been satisfactorily supported.

Clinical History.

The adhaesive Pylephlebitis only then gives rise to appreciable phenomene, when it occludes the lumen considerably or totaly of a.) the main trunk of the portal vein

b.) the larger branches c.) or a greater number of the smaller liver branchings d.) or finally the central terminations of the principle vein radicles. This all being the case provided the pylephlebitis will not be accompagnied by atrophying cirrhosis of the liver. In case of occlusion of single branches of the liver no other appearances are noticable besides frequent excoreation of liquid pale yellowish feces, symptoms of anaemia and gradually developing dropsy, anasarca etc. In adhesive Pylephlebitis of the main trunk and the larger branches of the portal vein after the symptoms of the primitive

morbid process have for some time preceeded and after in single cases slight pains have perhaps been experienced; the appearances of the damming up of blood in the region of radicals of the portal vein are more or less rapidly developed; also rapidly increasing Ascites, which soon necessitates the paracentesis of the abdomen and after the operation rapidly renewing.- then a rapid and a considerable swelling of the Spleen.- increased dilatation of the veins of the abdominal wall, especially of those that run towards the lower part of the thorax and axillary space.- watery

or shing, frequently bloody evacuations of the bowels, – not seldom vomiting, occassionaly vomiting of blood. – Scanty Se-and excretions of a dark and concentrated urine – rapid loss of strength and appearances of Cachexia. Under increasing exhaustion a fatal termination is bound to result more or less rapid. These symptoms are more or less rapid developed according to the fact; whether the thrombosis is brought about slowly or rapid or whether it is complete or incomplete or whether or not the collateral circulation is sufficiently well developed.

Symptoms.

The portal vein on account of its deep situation is imperviable to physical investigations. Large tumors in the vicinity of this vessel and pressing upon it, might perhaps by means of palpation be proven to exist, i.e. under vaborable circumstances. The pain which is conditioned by the process is not very intense, and is only occasionaly experienced when the inflammation of the vessel-wall resulting from thrombosis of portal-vein has become to some degree intense. The most important symptoms are conditioned

by the damming back of the blood into the radicales of the portal vein. One of the most constant symptoms is Ascites. In cases where a trifling a moderate Ascites existed before the occurrence of the constriction or even total occlusion of the portal vein; this will be rapidly and enormously increased when the thrombus forms. In those instances in which no symptoms of Ascites, resulting from the primitive disease, has made their appearence, the abdominal dropsy is in consequence of thrombosis of the portal vein developed exceedingly rapid, and is rapidly increased

to a threatening degree, this increase occuring more rapid in proportion to the rapidity of the formation of the Thrombus in the portal vein. This form of Ascites is very soon renewed after Paracentesis. In single cases Ascites does not make its appearance at all, either because the Thrombosis is one of a clap formed lately during a long continued agony, or certainly during a period shortly before death, or because the damming back of blood which led to the serous transudation, was equalized by profused gastric or intestinal hemorrhages, or finally because a sufficiently complete collateral circulation

has developed itself. Swelling of the spleen as frequently as Ascites, but it may be absent from the same causes as those which were above related to ascites, and in addition to those the cause, that the organ owing to preceding disease may have lost its power of expansibility Swelling of the Spleen is also rapidly developed. Dilatation of the abdominal veins is only observed in half of all cases. The so called „caput Medusae" is very rarely developed, as the vena paraumbilicalis or umbilicalis empties itself into the left branch of the portal vein, which most commonly is itself thrombosed and can very

rarely be made clear for the blood-current. Only those veins of the abdominal wall are most commonly involved which run from the epigastric region towards the Thorax; the venae epigastricae then, with the current of blood directed upwards, as it is customary to be observed, in advanced Ascites by which compression of the vena cava ascendens is caused, or in constriction or total occlusion of this vessel and also in other instances. Diarrhoea occurs comparatively as often as Ascites. Gastric hemorrhages occur occasionaly and are so profuse, that they may produce a fatal termination before other appearances

of Thrombosis of the Portal vein can be developed. Some observers of this disease declare to have noticed increased appetite, which circumstance (if it be a fact) I am unable to explain. The Urin is scanty and concentrated in Cirrhosis of the Liver and frequently contains sediments of acid salts and Albumen. The liver is generaly diminished in size and only in rare cases it is normal or enlarged. The latter is commonly only observed when the Thrombosis has occurred together with scirrhus. The decrease in size of the organ is either a result of the occlusion of the

occlusion of Portal vein, or of the general disease of the liver which is conditioned by a Thrombosis. Icterus a condition brought on by pressure on the gall-duct, is rarely observed. The secretion of the gall is not greatly interfered with, in Thrombosis of the portal vein, which is explained by the fact, that in case of an occlusion of this vessel, the material necessary for the function of the gall is conducted it (not altogether but) in somewhat sufficient quantity by the accessory portal veins. Fever symptoms are absent. Rapid emaciation and loss of strength occasionally scorbutical symptoms,

are soon apparent, which is partly explained by the pressure exerted on the vena cava ascendens by an enormous ascites; by an increased blood pressure in the area of the vena cava inferior, by the streaming in of blood which can not find its way through the occluded vena porta, and finally by cachexia.

Diagnosis.

Although single members of the medical profession consider this a task connected with little difficulty, yet the diagnosis of the morbid condition which constitutes the theme of our treatise

is nearly an impossibility. We are inclined to be of the opinion of Dr. Bamberger and Niemeyer and others, who believe also that a diagnosis if not alltogether impossible, is under all conditions connected with considerable difficulties. In those cases however in which the symptoms of the damming back of blood in the region of the portal vein are either alltogether or at least to a greater part missing, a diagnosis of thrombosis venae portae can not be thought of. But even in cases in which either all or at last the most important symptoms of the damming back of blood are

distinctly developed, the nearest conclusion that can be made is that the circulation in the region of the Vena porta is considerably interfered with, or entirely suspended. The position which this cause or obstacle to the current of the blood occupies and its quality, must be attempted to be at, by the most accurate consideration of the results of physical examination, of the peculiarities of individual symptoms, of the process of the etiological instances, and of the morbid conditions which may contemporaneously exist in other organs.

This in the majority of cases is a very difficult problem and frequently impossible to be solved. If the symptoms of retardation are distinctly expressed and a high degree of Ascites present, then the establishment of tumors in the vicinity of the portal vein is not to be spoken of; even after paracentesis has been performed such is rarely accomplished. And even if it should be accomplished to prove the existence of processes which may give rise to Thrombosis of the portal vein, yet this fact could with great uncertainity only be rentered practically of value for the diagnosis; For there are cases recorded in which cancer

of the Liver and of the glands of the part of the Liver were present in addition to Cirrhosis.

Prognosis.

The course of the disease is either acute or chronic. The duration of the process is generally a comparatively short one, lasting from a few days to several weeks. In exceptional cases the process continues for several months.

The prognosis is to be given, according to our present experience as absolute fatal. Even though in very rare cases by the developement of a tolerably suffi-

cient

collateral circulation, life may be prolonged for years. Death follows resulting either from the primitive cause, or from frequent gastric intestinal hemorrhages, or from a grade of Ascites and its consequences, from Cholaemia or Peritonitis, or finally from certain complications as Pneumonia, Pericarditis and Erysipelas.

Therapy.

The treatment is symptomatic, the same principles being applicable to it as to Cirrhosis.—

The process which forms the basis of Thrombosis of the portal vein must as is self evident find the

proper and requisite consideration.

February, 1883.

Philipp Heldrich.

[illegible]

[illegible]

Exc[illegible] [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] reactive [illegible]

[illegible]

[illegible]

[illegible] reduced [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] of alcohol [illegible]

[illegible] crisp [illegible] beneath [illegible]

[illegible]

[illegible] disease [illegible]

[illegible] disease [illegible]

[illegible]

[illegible]

[illegible] the [illegible]

[illegible] with and [illegible]

[illegible] the [illegible]

[illegible] upon examination,

[illegible] the [illegible]

[illegible] been [illegible] [illegible]

[illegible] the [illegible] effect [illegible]

[illegible] and [illegible] [illegible] life of

[illegible]

[illegible]

and in an inactive condition.

[illegible]

[illegible] sufficient [illegible]
[illegible] disease.

[illegible]
[illegible] after is [illegible]
[illegible]
[illegible]

[illegible]

[illegible]

[illegible]

[illegible] being flexible, [illegible]

[illegible]

[illegible] result of fluid pressure and

[illegible] increase [illegible]

[illegible] upon inspection [illegible]

[illegible]

[illegible] [illegible] [illegible]

A Thesis on Spinal Injuries
Presented to the Faculty
Class of 188

Hepatitis.

Medical Treatment.

The ancient pathologists ad-
mitted a very comprehensive definition
of hepatitis, including under that
most all affections of the liver, espe-
cially such as are attended by pain.
In this sense, therefore, the diagnosis
[illegible]
frequently mere, affections of the adjacent
organs—those of the right hypo-
chondrium, the right lung, the right
[illegible]
[illegible] with it.

Description [illegible] appears to
[illegible] that [illegible]
Epicrates gives an account of the
rising of an hepatic abscess in
that country, while in Celsus may be
seen the statement that people were
the habit of tapping them [illegible]
means of the knife, the use and
power of a man accurate knowledge
of the disease by the Pathological-Anatomical researches made in the sixteenth

The list of cases given by Bonetus
pages under the title "De Hypochondri
a Tumore et Dolore" are represented
as exclusively in simples the direction

[illegible] disease

[illegible] to [illegible]

[illegible] hepatics are [illegible]

physicians who have had an opportunity

[illegible]

are sufficient to convince an

Etiology

[illegible] of the disorder, the prime

1. Mechanical

Extension of inflammatory and

[illegible] processes from the [illegible]

Embolism in the vessels of the liver.

Mechanical Injuries.

Injuries either from penetrating wounds of the liver, complicated usually by the presence of a foreign body; or from injuries of the organ induced by a blow, or fall upon the region of the liver and by a severe concussion or by a fall from a great height. However, the intermediate injuries not strike in the vicinity of the strong pressure, movements, and liver is subjected to in certain of the body, if long maintained.

I have observed an acute hepatitis (termina-

in abscess) occurring in a woman, thirty-eight years old, previously healthy, that was confined immediately after she walked a German mile, in cold, rainy weather, carrying a child of three years upon her left hip, and an op-

[illegible]

[illegible] seem the most [illegible] to give rise to this disease.

[illegible] abscess from contiguous structures.

[illegible]

[illegible] from the cuneiform into the [illegible] of cuneiform coalescence spread further into distance of the liver, thus setting up

[illegible]

[illegible] also, [illegible] [illegible]

[illegible]sses, proceeding from ulcerations

[illegible]ts of the lungs of the ductus hepati

[illegible] are rather more frequent in a dilata

[illegible]ation of the intra-hepatic biliary ducts,

[illegible] by calculi or wandering worms

[illegible]ms, extends into the contiguous parenchy-

[illegible] of lungs [illegible]

[illegible] biliary ducts, in consequence of the closure

[illegible] abscesses, also, by the penetration

[illegible] perforating ulcer of the stomach into

[illegible] acid gives rise to

[illegible] of the [illegible]

[illegible] the stomach.

[illegible] in the processes of the [illegible]

[illegible] the portal vein. - after injecting mercury

the mesenteric vein, Cruveilhier found

[illegible] collections of pus in the liver, each of

which contained a globule of the size,

[illegible]

abscesses in the liver by the injection

of pus into the venous system.

[illegible]

[illegible] in any part of [illegible]

[illegible] fragments, [illegible]

[illegible] chance, [illegible] into its [illegible]

[illegible]

[illegible] the [illegible]

[illegible]

[illegible]

[illegible] of this process.

Some of the cases [illegible] under [illegible]

[illegible] these cases are placed for a greater distance, with [illegible] and [illegible] accompanying, so that the [illegible] of the inner disease is easily seen. In other cases, on the contrary, the process [illegible] the [illegible] seems to leave no trace [illegible]

[illegible] of the organs from which [illegible] may become the starting point for the [illegible] of [illegible] [illegible]

[illegible]

[illegible] speaks of a [illegible] small abs[illegible]

[illegible] portal vein,

[illegible] some numerous valve-[illegible] [illegible]

[illegible] along with a large infarction

spleen,

[illegible] of the [illegible] are sometimes [illegible]

[illegible] very succulent, a minute [illegible]

[illegible] hepatic abscess in two cases in

[illegible] an operation (incision & drainage) had

[illegible] performed but a short time before

[illegible]

for pyaemia and

[illegible]

[illegible] in a man who died two days after

[illegible] operation [illegible] a [illegible]

1

attacks equally the trunk of the bo

the embolism may originate from
[illegible] in the ramifications of the porta
the influence of other impure bis

effects in the [illegible] hepatica. Cohnheim
[illegible] numerous small abscesses in the pe
[illegible] of the liver after the inje
[illegible] pus into the blood, doubtless
[illegible] repair abscesses, which open ([illegible]
[illegible] one, it must be admitted) into the bain of
[illegible] Embolic [illegible] and [illegible] sanguineous
[illegible] are the [illegible], originate in this man
[illegible] presence of [illegible] in the ar
[illegible] hepatica has been frequently sum

[illegible]

[illegible] 3 have commenced in San [illegible] at the age of [illegible]

[illegible] operations, [illegible] are less [illegible] to pass from the venous system [illegible] hepatic veins, the [illegible] and pulmonary circulation, where [illegible] metastases are [illegible] in the [illegible]

that fragments detached by the force of [illegible] the [illegible] veins, and not the primary [illegible] washed along into the hepatic veins must be admitted, however, [illegible] of [illegible] may be with certainty conceived that this

ess has taken place, still, the circu-
-ce that not unfrequently, the vessels o
the liver are, according to anatomical analog
of clearly more recent than those on the
es points to this theory. But the most sig
-ficant [illegible]
when the lungs remain free from metastases,
[illegible]
[illegible] or pus globules traverse
pulmonary circulation, their diameter
the less than the calibre of the pul
[illegible]
made to explain their retention
the capillaries of the liver, by assuming
subsequent extravasation from the deposit
[illegible]

although perhaps in itself admissible,
has not been proved. The theory
of Cohnheim, supported by Lauenstein, has
the direct emptying of the terminal
[illegible]
way is furnished by which even quite
embolic can pass from the system
veins into the hepatic artery, appears
[illegible]

[illegible] to be precluded in the man-
above indicated, from suppuration.

[illegible]
[illegible] of the most common occurrence

the hepatic zone. They form one of the constituents of so called pyaemia, and appear in all the manifold diseases in which this lesion is consecutively developed. They are, however, far [illegible] than the [illegible] [illegible] of the [illegible] [illegible] [illegible]

[illegible] of the hepatic vein, has raised the [illegible]
[illegible] whether or not, under certain conditions, [illegible]
the infecting masses may make their way [illegible]
[illegible]
[illegible] the parenchyma of the gland.
[illegible]
[illegible] Chew, [illegible]
[illegible] flow [illegible] the hepatic [illegible]
[illegible] pyæmic abscesses of the liver,
Chew is quite right in his objection to the
conclusive force of this experiment, because
[illegible]
[illegible] to be compared to the ordinary
[illegible] of disease bacteria,
[illegible]
[illegible] the theory of reflux of cholera

[illegible]

[illegible] vein, is, on the other hand, [illegible]

[illegible] native [illegible] is [illegible] as on

the tropical regions of Asia and Africa [illegible]

[illegible] as five per cent of all illnesses, and

[illegible] even a larger proportion, in the

[illegible] zones of America

[illegible] a rare occurrence.

[illegible] within the tropics there are also certain

[illegible] which enjoy the [illegible], or may be

[illegible] from this affliction; such

[illegible] Sandwich Islands, which has [illegible]

[illegible] number of cases

[illegible]

[illegible]

[illegible]

Owing to the [illegible] and
sojourning for [illegible] years are needed
to [illegible] under [illegible] of a [illegible]
[illegible] and [illegible] beginning are
[illegible] regulated, of the natives, by [illegible]
[illegible] such animal food to which they are
[illegible] at home and [illegible] frequent use
use of spirituous liquors.

Pathology.

Prevalence of this variety of disease in general
[illegible]
It presents such a complex variety

[illegible]

[illegible]

[illegible] of [illegible] in the [illegible]
certain [illegible], [illegible] in the
which the veins of the liver have no

[illegible]

most perfect representation we
have its most marked [illegible], is

[illegible]

[illegible] are [illegible] [illegible]. The [illegible]
is well with symptoms of hepatic [illegible]
of the liver, which are not unknown at
short time. Various [illegible] [illegible]
[illegible] with gastric disturbances, pains in

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] and [illegible] though at times active condition of the bowels, are the characteristics of the first stage. Suppuration is established, the fever [illegible] intermittent type; [illegible]

[illegible] intervals; the tendency to pain enlargement of the liver increases; distress in the respiration supervenes; [illegible] a short dry cough; [illegible] through.

[illegible] of a continuation of the [illegible]

[illegible]

[illegible] the [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible]

[illegible] [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] mous capsule, which often [illegible]

[illegible]

[illegible] adherent to the mucous wall in a

[illegible]

discharge their contents externally either di-
rectly or through the medium of another organ.
These portions of the liver not implicated
the inflammation, the pneumonic exhib-

[illegible] upon, or where it is replaced.

[illegible]

At the beginning of the suppurative stage, during its subsequent course, the extension of the enlargement depends chiefly on the number and situation of the abscesses, their influence being, of course, exerted by compression of the surrounding parenchyma; or by an external hyperaemia of the gland [illegible] cause of, and may also continue subsequent

[illegible]

[illegible]

[illegible]

[illegible] also, in many cases of the disease, it is frequently erected temporary. [illegible] cases where it is not attended.

[illegible] short time.

[illegible] and tendinous sounds [illegible]

[illegible] Cerebral Symptoms — delirium, somnolence, [illegible] end of life, and [illegible] then occurs with [illegible]

[illegible] Symptoms such as a thick, [illegible] tension and distention in the epigastrium,

Diagnosis.

The most valuable diagnostic characters of the cystic abscess are, a severe, gnawing, aching, and throbbing pain in the epigastrium, right and left hypochondria, marked enlargement of the liver, [illegible] movement of [illegible], and [illegible] in the right and [illegible] [illegible] of the eye and skin.

As the matter accumulates and nears the surface of the [illegible] [illegible] [illegible]

[illegible] an escape of the blood, its approach being always [illegible] by an exsiccated tongue, and by a [illegible] cadaverous state of the surface, a condition in which it is impossible [illegible]

[illegible] meet with certainty to the liver, or which may be equally due to some other disease of [illegible]

[illegible] usually with, or in the train of, other dis[illegible]

[illegible] meet with dysentery occurring in a-

as an accompaniment of pyaemia, as
some others preceding from affections of
the gall ducts.

Pain of the lower lobe of the right lung
should be studied with great care, in order
to determine as to the presence of an hepatic
abscess.

Prognosis

Suppurative hepatitis terminates much more
frequently in death than in recovery, in
tropic climates, in North Africa there
seem upon the average a majority of
fatal cases.

By the above mentioned author found
mortality of opha 114 to 97 percent, he h
of admits, paleness, flatness or cirrhosis

[illegible]

[illegible] physicians practicing [illegible]
[illegible]

[illegible]
[illegible] of the passage having [illegible]
[illegible]

[illegible]

[illegible]

[illegible]

[illegible] of the [illegible]

[illegible] of the [illegible] of [illegible]

[illegible] perceptible [illegible] a [illegible]

[illegible] before [illegible] after the [illegible]

[illegible] it is [illegible] that the [illegible] [illegible]

[illegible] [illegible] [illegible] to the [illegible]

[illegible] the [illegible] of a [illegible]

[illegible] the [illegible] [illegible]

[illegible]

[illegible] leads to the question under what circumstances

[illegible] is it the [illegible] of [illegible] [illegible]?

[illegible]

[illegible] a perceptible [illegible], a [illegible]

[illegible]

[illegible] appearance [illegible], he [illegible]

[illegible] treatment for [illegible]. The [illegible]

[illegible] when well trained eye he

[illegible]

[illegible] initiated by [illegible] forward and [illegible]

[illegible]

[illegible] the [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible]

[illegible] [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

a little precaution as necessary, in

[illegible] the [illegible] may place

the perforated [illegible] above the inner

[illegible] to exclude the air.

dirt, filth, and out of door life, in

his house [illegible] than medicine.

Puerperal Mania

Pratt, Thomas M.D.

Virginia

1883

Fourteenth Morning

While any of the unfortunate classes of our race are calculated to excite the commiseration of the philanthropist it is probable that none so completely enlists his sympathy as the class of humanity upon which we now propose to write. "With a great many of the ills to which flesh is heir", the liability is greater among particular classes who present the combination of health and circumstances that favor disease & pauperism. In one case it is the poor and ill fed or exposed, as in Russia in scurvy, in another, it is among the wealthy idle or overfed, as occurs in gout. Here however we have a ghastly visitor who in most of its forms "knits neither wool nor

at the palace of the rich or at the home of the poor, if any distinction is shown we will find our cross among the wretched and insolent rather than the sluggish or robust. "It has been remarked by Esquirol" that we most frequently meet with cases of hereditary insanity among those miserable outcasts of society, whose sensibilities have not yet been destroyed, and who dwell upon their fallen condition; the other institutions, disregarding the nice divisions and distinctions of merchandism physiological science, under the head of Temporal Insanity, classed all of the mental aberrations of pregnancy and parturition, nor do we believe that

the cases would have amounted to many, but they not also have to compound the treatment of different affections under a common method. We may safely leave their lot to the chance of using an inclusive term. Yet while we shall call all cases "Puerperal" which occur during pregnancy, or after labor, — including the period of lactation, yet we shall distinguish by seriatim, into sub-divisions from cause, viz:

I Insanity of Pregnancy.

II Puerperal Insanity — (Properly so called, and occurring within a limited period after delivery)

III Insanity of Lactation.

Under each heading we will consider

varieties in order, the classification is both natural & practical, and will include all cases likely to fall under the observation of a physician. Regarding the relative frequency of these classes no accurate determination can be made without large and accurate statistical observations such as we have not yet opportunity to make, — however we find on record, and combine, the observations of Drs Luke and Mare, made respectively in Edinburg and Paris. One hundred and five cases occurred in the former and three hundred and two in the latter city. These give the following relative per cent,

Insanity of Pregnancy, Puerperal Insanity

13.06 52.67

Insanity of Lactation

33.17.

I. Insanity of Pregnancy. While the period of its occurrence varies yet we may generally look for it during the third and fourth months. The forms generally assumed are — A. Acute Mania. B. Melancholia. C. Secondary Mania. Most usually we see the first two forms mixed or working simultaneously upon the same patient; — but the general rule may be considered as follows, — Melancholia exists alone during the earlier part of the term, — acute mania on the other

have generally made its appearance after the third month, and when it occurs it is apt to continue through the term of pregnancy, nor is it by any means certain that it will cease with the advent of the factus. Thus, though such cases are met with often enough to occasion hope, in actual practice it is impossible to cease the recurrence of acute mania from fears of Melancholia in more than a general manner, nor is it desirable. Exclusive for prognosis, to genuine diagnosis further may be required. The writing may be hardly presented as fact when the patient is restless and uneasy, often turns over the eyes or pillows

or pain. [illegible] support the business — [illegible] begins the control of anodynes — Mania follows and ends. The cerebral tendency is generally morbid, nor do they come down about the corners. Sometimes homicidal effort are made [illegible] strangling, and the homicidal mania is not uncommon. When infants and little children are assaulted they are never safe from injury. After the patient has sink a lethargic state in a state of sullen obstinacy, at times they are subject to wild vision, which when expressed in words closely parallels the similar expressions in Delirium Tremens. The mental faculties generally become

formerly, Kleptomania, Dipsomania, Pyromania, and indeed any of the broken forms of mania, may come into exercise. The appetite formerly becomes morbid, and a symptom that sometimes exists in some pregnant women, — namely a tendency to eat toothy and indigestible articles, — is generally dominant. When Kleptomania occurs it will probably continue, — despite the potent misery, — until a natural crisis is born, and this condition has been known to run through several incomplete pregnancies in succession, Result, affluence, and moral outlook, come in this case to cast no influence. In milder forms

patents, I have been asked the privilege of going at liberty, have been frequently purchase several dollars worth of goods, for the express to appropriate some trifling article not worth but a few cents, and which they have given or thrown away after obtaining. Under such influence deeds may be committed, without the heinous feeling that is ordinarily criminal. I know of a case in which a pregnant woman placed an infant in a large trough filled with water, and firmly insisted afterwards that it was a duck. Sometimes a spirit of mischief takes possession of the patient, as in the case related to us by a

fabrication, of a patient who chased off a roomful of female visitors, said her hands full of stomach worms that she had just discharged. It is truly amazed that the line of demarkation between sanity and insanity is narrow, — all women have frequency with more or less deed, and when this becomes intensified it really passes into a form of monomania. What is slightly called "hysteria", when increased in degree is insanity; such as what is known eccentricity, when augmented becomes craziness. That dread is a factor in the disease upon which we treat is easily seen when we observe

that primiparae are more liable to the insanity of pregnancy than Multiparae, this dread increases, sometimes by hereditary predisposition, by certain neuroses, by drunkenness, the opium habit, epilepsy, scrofula, the predisposing age, (between 30 & 40) and other causes intensifies to such degree that the patient loses self-control; then they are insane. In the first stage of the disease the patient is often aware that she is more prone to strange delusions & fancies, which is oppressing her mind and clouding her will. Her knowledge of the fact is the index of her sanity, the unbalancing

of the mind consists in acting on an opinion. It is probable that patients sometimes vibrate between the two states, but are busy the morbid condition obtains sway in the mental centre,

Prognosis. Fortunately this is generally favorable and the more so as the disease approaches Melancholia, and modes from acute Mania, Any complications from hereditary taint makes the prognosis more grave — so the physician should inquire regarding Epilepsy, Syphilis, Scrofula, hysteria &c. before forming an opinion. When the case presents a prostrate condition of system from anæmia, stomatitis, or innutrition, debility from excessive mental grief

or amity, our ability to compare the complicating cause becomes an element of the prognosis. We cannot hope for a cure generally, before the termination of the pregnancy, while our forms which mania and melancholia are so involved as to require a treatment in common, the third form which we now consider is almost sufficiently distinct to admit separate classification. We refer to (C) Puerperal Mania, sometimes during difficult labor, especially in the case of Primiparae, when the head of the child is passing the outlet or the perineum, the intense agony has been known to occasion this form of Mania, so well as special insan

incoherence of thought and speech, and even homicidal impulses have been recorded as occasionally occurring among its symptoms, it becomes important to give it due weight in medico-legal view. The condition should it exist long enough to permit treatment, requires the use of chloroform, ether, or chloral hydrate: the latter by mouth or injection into the rectum, and the former by the mouth or by inhalation, or some other prompt anodyne medicine.
It is likewise the duty of the obstetrician to watch lest in his struggles the mother may injure the half born child, this may be

readily accomplished by the forcible resistance of female attendants which are generally present.

II Puerperal Insanity (proper)

This may be defined as the insanity which occurs after later, for a short but not accurately defined period. Probably a month will include almost all of the cases. Many remarks which we have made upon the Insanity of Pregnancy apply with almost equal force to the post-natal form of disease.

In Puerperal Insanity the cases presenting the melancholy type are not so numerous as those which are marked by acute Mania.

While the acute form of the disease has been ascribed to various causes by different writers, it is probable that no theory comes as nearly fulfilling the requirements of an explanation, as that which ascribes the disease to a septic ferment, or an abnormal element in the circulation, for there is always a great liability to the formation of ulcers, ruptures, or bruises, and inflamed mucous or muco-pus surfaces, or the lining membrane of the genitalia at the time of the hemorrhage, it naturally follows that if blood and urine poisoning (septremia) can occur at all by absorption,

it will happen by retention of this fluid, additional causes are as follows: after labor there are generally retained clots of blood, and often fragments of the placenta, when the proper attention is lacking, these especially in summer, quickly become offensive, and septic enough to produce metritis or blood poisoning. Although we will not accept this view - we believe it accords with observation, it is urged as an objection to the theory that in puerperal convulsions (eclampsia) the uremia causes albuminuria, while in the puerperal insanity albuminuria usually exists at first,

are then entirely disappeared, with
unchanged the disease off with it,
these facts certainly prove that
eclampsia and puerperal insanity
have a common origin, and the
author rests upon the fact that
probably all cases of puerperal
are attended with albuminous
urine, and it may, so far as
known, be natural for the urine
to remain albuminous for a
short while after labor. If this
surmise is correct, then albuminuria
may be intercurrent, but not
consecutive of puerperal, while with
eclampsia it is both intercurrent
and consecutive, the frequent presence

of edema in the worst cases of eclampsia, make it probable that the same pressure which occasions escape of serum from the veins into the cellular tissue, also interferes with the renal function, prevents the proper elimination of excreta by the kidneys, and ultimates in convulsions, by poisoning the spinal cord; on the other hand a broad surface absorbs septic poison from retained clots, placental, or other uterine concomitants of the child, this circulates in the body, poisons the brain, and produces insanity. Other arguments may be adduced

in support of this view of the etiology of Puerperal Insanity. What possibility is not aware that extensive pneumonia subsides soon after the child is born; the pressure on the lungs being removed they recommence their eliminating function and remove the uraemic poisons. Who has ever seen this quick return to health in Puerperal Insanity, a poison in all probability, self multiplying as the scrofulous and syphilitic virus, has changed the blood with its venom, every fever a septic bacillus begins to be in brain, tissues or brain it is a nucleus for an abscess.

figure into that giant disease,
manifestation at one time hepatic trouble,
at another consumption in its
breaking down stage, and of another
any of the multiple diseases of the
brain - has found a lodgment -
and will not be dislodged quickly,
in fact sometimes not at all but hope
lessly of some of the ultimate
causes of Puerperal Insanity and
we now take in consideration
some that are simply predisposing.
Among these to make our subject
as all complete - hereditary
predisposition must be considered,
all that has been said therefore
upon the Insanity of Pregnancy

of poison ivy not without quite force. Probably if all cases could be traced back to result from one third hereditary, Dr. Weber (Klein) found forty-five cases out of an hundred and eleven, that could be traced back — a fact of startling significance. This hereditary exhibit at first sight appears the strictest theory, — but the explanation is clear, some individuals, that even some families, are easily poisoned by substances which are only slightly active with others. We see this exhibited in the case of the poison oak (Rhus) (Anacardium) one person

murder it with impunity while another dares not touch, sometimes even hardly stands its presence without touching, when covered with dew. That certain systems eliminate poisons more actively than others also helps to explain the fact, for this being granted - that excretory and absorbent power is hereditary - the organs themselves must present hereditary power or weakness. To sum up the argument - it is not really the disease which is inherited, but the condition of the system that makes a suitable subject for the disease. In this argument regarding septic poisons we do-

not disease to account it exclusive of all others, He would be foolish who would say that because poison will inflame the eye, - therefore nothing else can inflame it. The analogy between the acute mania's before and after delivery is too great to be disregarded. In the former case the poison may be ictric or even uraemic, with its force spent upon the brain rather than upon the spinal cord. In both cases the action may be from an hereditary syphilitic, scrofulic, or other virus, with its action directed to the brain, - and in the forms of Melancholia the lack of nutrition,

and absence of haematin in the blood, may occasion as much disturbance, as a positive septic cause does in the acute cases. Regarding the theory of septic poison, let me call the attention to a fact which without it is obscure, J. M. Duncan, in "Lectures on diseases of women," adverts to the prevalence of Uterus gravis as a factor in Eclampsia, and then (on page 73.) speaks of its not being as deep as common jaundice, and finally says that Eclampsia may exist without any yellow discoloration. Is it not probably that those so called cases of Puerperal convulsions,

which themselves present delirious symptoms, are really as much pyaemic as ichoric in their nature, the septic force acting upon the spinal cord rather than on the brain, - in which latter case we would have puerperal insanity. Symptoms of advent. The outlines of this disease with slight modification will readily apply to cases of mania in general. The countenance plainly tells the disease, and he who has seen a few cases can almost determine its advent by the eye of the patient. The face looks anxious, and may be either pale or flushed. - The general

expression is one of restlessness, the temper becomes fretful and impatient, the mind is seriously impaired by loss of memory and vacillation, the patient becomes angry listless, obstinate, or suddenly silent, and will often repeat mechanically, as an echo, any remark that may be addressed to her. The words sometimes become rapid and incoherent, — sleep is much disturbed, or frequently broken, vague feelings of mistrust, — with watchfulness and premonition of evil, occurs. If opportunity offers attempts at chief murder may be made. Fear of death,

muttering, rubbing the inside of the lips with the hand, with immoral and indecent talk, are all laid down by authors as symptomatic of the disease, and it is probable that twice as much could be added as of common occurrence, for no two cases are identical, though they may present parallel similarities.

(B) Melancholia, When Puerperal Mania is of hypochondriacal or hysterical form, it of course cannot be regarded as from septic absorption, but must be referred to the numberless depressing influences which are capable of acting on the nervous centres, — such as inanition, anaemia,

mental grief, anguish, expressive.
While this form of mania is much milder, it is also generally disposed to be more lasting in its action. With some cases recovery promptly occurs, other gradually increase in their intensity, and occasionally takes the patient to the grave, others again will fluctuate between better and worse, until they finally settle down into permanent dementia. Happily recovery is the general rule, and we may commonly read the result by the intensity of the symptoms, especially the degree of inflammatory action. occasionally this form will

occur in successive pregnancies, in such case the endeavor of the physician should be to remove exciting causes. Hereditary influence may have its weight in this as well as in the Insanity of Pregnancy.
Sometimes the delusion of the patients centers upon religious subjects, producing fear, dejection, and apprehension. Again they will claim that they have committed "the unpardonable sin," and with the self accusation exhibit intense dread of threatened "eternal damnation."
When the suicidal tendency becomes marked, patients require the closest and most careful

watching and even then they will sometimes succeed in self distraction, for their cunning is augmented to a remarkable degree, and their plans persisted in for days.
A common symptom is great listlessness, the patient being mute and motionless and only speaking and acting mechanically, and at once relapsing into her former state.
In this automaton condition she will frequently appear without wants or desires, eating only when food is urged upon her, and then in moderate quantities, and sometimes paying no regard to the calls of nature. Motionless as a statue

they will sit without sleep through the night, or if they are urged to recline on a bed it is not to rest, but to form phantasms from the flickering shadows, and worry the mind with endless misgivings. The countenance in Melancholia, while often colored, is frequently pale and sunken, and the pulse is generally accelerated. The common condition of the bowels is one of costiveness, - being frequently very difficult to move. Naturally the tongue becomes furred, the breath fœtid, and the mouth as dirty as a case of Typhoid fever. Frequently the dried and parched

throat will not allow the use of solid food.

III Insanity of Lactation. While this is not so common as Puerperal Insanity, it is probably twice as frequent as the insanity of Pregnancy. Among its causes are to be ranked anything that has a tendency to produce anaemia, or physical exhaustion. Often protracted and heavy flooding we may always fear its advent. Also among women who have borne children very rapidly, and among those who have continued to nurse until their blood has become impoverished. Sometimes we meet with it where the constitution of the patient is so fragile that the attempt

at lactation was contra indicated from the beginning. When examining the heart of the patient or better still the veins of the neck we will readily detect abnormal sounds occasioned by the impoverished blood. As the disease is one of thin blood and feebleness, we naturally expect it to present hypochondriacal rather than maniacal symptoms. Should the form be violent, as occasionally happens, it will nevertheless generally prove more transient than in the true puerperal form. While we may by removing the debilitating cause — generally relieve our patient with great rapidity, it is also equally

the fact that they are in much risk of passing, from this form of mania, into incurable dementia, than from any variety upon which we have treated. For a description of the symptoms of Melancholy from Lactation we refer to the full descriptions given of the complaint under the two preceding general headings, for there is a general resemblance between all cases of Melancholy and all cases of Mania among, not only all Puerperal cases, - but even among non-pregnant women. Probably the most peculiar and diagnostic symptom of all others, - in these cases of uterine and nerve diseases, is the one

incidentally mentioned above, of immodesty. It was the opinion of Sir James Simpson, that the organ affected causes the type of the disease manifestation, and his theory is certainly carried out in the puerperal mania. Such patients seem to dwell on sexual subjects, and we may look for the most obscene and disgusting language from those whom we have regarded as pure and virtuous. Self accusation of unchastity are very common, and it is said have resulted in cases of legal complication. It is always well for the medical attendant to have this in mind, as by neglecting

it he may innocently involve himself in school,-

Post Mortem appearances,— The subject of morbid changes of the brain tissues and their relation to disease has never been clearly and fully studied,- nor does the profession deserve blame for carelessness, for of all studies possible this is probably the most involving and apparently contradictory. In cases that were well marked, as form septicemia, as many as four distinct appearances have been found, without diagnostic symptoms during life,- and it is asserted that as many forms of disease have been found in the same brain. Ramsbottom tells

that when a peculiarly violent septic epidemic raged in a lying in hospital, of which he had charge, no morbid changes of consequence could be noticed in the brains after death, and he explained it by the quickness with which the patients were carried off. Probably no observation of the brain is of much value unless made by the microscope, - and some cases have recently, when so examined, indicated the commencement of inflammation by cloudy swelling, granular infiltration, and cell disintegration. The appearances as laid down by standard authors as occurring in puerperal mania are

unusual pallness and exsanguinity, with an extremely empty condition of the blood vessels, particularly the veins – Tyler Smith says "no constant morbid changes are found within the head." Duration of cases They generally extend from three to six months. Sometimes the period of illness remains a blank, but in other cases the antipathies then formed are retained. The chance of ultimate recovery is much lessened when the cases extend over six months, and generally melancholia will outlast acute mania. The duration is also much determined by the nursing and medical attention.

Proper seclusion, cool well ventilated and somewhat darkened rooms, and gentle nurses - are necessary for speedy recovery.

Treatment - Only a few years ago there was a strong tendency to treat all cases of Puerperal mania by over active means. Then it was customary to bleed heavily, to shave the scalp, and cover the head with blisters, and to pour in Calomel ad libitum. The day for this potent treatment for all mental diseases has fortunately passed, and the method is now generally condemned, as not only useless, but is calculated to augment the dead roll.

How much greater stress is put upon judicious nursing - hard watching, and plenty of nutritious and digestible food. By assorting our cases as diseases of debility, we meet with more uniform success. In treating the Insanity of Pregnancy we cannot act as boldly as we would in the other two forms, for regard for the unborn child requires that we should do nothing to help it prematurely into the world. Should we use purgatives, we should select those whose action is upon the duodenum, preferably to such as aloes, which by their action on the rectum might occasion sympathetic

constipations of the bowels, and we should first rely upon laxatives rather than cathartics. When the costiveness is great and the mouth and tongue foul, we find best use mercurials, in moderation, until the fecal accumulation is started. For the melancholia we may use Valerian, Asafetida, or Bromide of Potassium, and to allay restlessness - Chloral Hydrate, in gradually increasing doses, until the proper effect is produced. Formerly opium was largely employed, but the mature opinion of the profession seems to be tending towards its total prohibition

While we cannot agree with this, yet we believe - Chloral Hydrate is preferable as a hypnotic in these cases, and should we use opiates we would select Morphia, by subcutaneous injections, as both safer and quicker than any other method of administration. In all cases the patient should be encouraged to use nourishing food and drink, and we must also procure rest and sleep, even if we find it necessary to advance towards heroic treatment by large and repeated doses. Should the form of disease be melancholy, rather than acute mania, the objections to opium

mentioned above, do not apply, and its peculiar quieting effect upon the uterus is worth consideration. In Puerperal mania should we find tenderness of the uterus or fetid discharges - indicating Metritis, we should at once resume the patient to use antiseptics vaginal injections, - While almost any of the antiseptics might be used in this case - we prefer Carbolic acid in Glycerine and water, or a weak solution of Permanganate of Potass. - although the practice was formerly regarded unsound, it is well in this case to put a few blister on the abdomen. By thus removing the

cause of septic infection we may happily strike at the foundation of the trouble of the Brain.
When the violence of the patient is very great - the use of chloroform is allowable, - and while the patient is under the effects of its vapor - an injection of forty or fifty grains of Chloral Hydrate in saccharine solution, - but small in bulk, should be thrown into the Rectum, When the case is Melancholia, the patient may often be persuaded to submit to the treatment herself. When attempts are made at starvation, when coaxing and humoring have proved of no

avail, the patient should be forcibly chloroformed, and nutritious food be injected into the stomach through a rubber tube, introduced into the oesophagus. When the patient needs the treatment the use of anthelmintics has produced cures, - for the spinal excitement from worms is easily transmitted to an already enfeebled brain. Should the depression of spirits be marked nothing can produce a better effect than the judicious use of cocoa. - This presents the strengthening and stimulating effects of liquor, without encouraging inflammation. When anæmia exists - Iron

in some form, and bitter tonics, such as gentian, quassia or colombo, are imperatively demanded. Treatment of Insanity of Lactation. Evidently if the infant has not been weaned when it accums - it must at once be taken from its mother; and besides using means to improve the blood, as are appropriate in anaemia, - the lactial flow must be dried up, but not with too much suddenness. Turpentine and camphor externally applied will generally accomplish this. The patient must be allowed perfect quiet, in well ventilated, cool and some what darkened

rooms, and in other respects is to be treated in such a manner as to build up her exhausted system.

In winding up our thesis we can but regret that while much is known about that beautiful organ - the brain - there is yet so much that is, and seemingly will remain in the dark. The improvement from the day when maniacs were placed in cages, - there to be hungered by idle sightseers, as the accused of God, - is great indeed, and those noble men who instituted

the sufferer will always be blessed by posterity, but while thankful for this vast improvement much yet remains to be done. The hygiene of the disease is nearly perfect, but our medical and physiological knowledge is yet imperfect. May the profession move onwards, and if they may never reach the goal of perfection, let them continually endeavor in that direction

Ira H. Thomas M.D.

Pathology and Morbid Anatomy of Paranchymatous Nephritis.

by

Joseph S. Horner.
Class '83. Missouri.

Pathology and Morbid Anatomy of Tubal, Parenchymatous, Interstitial, or Acute Nephritis.

Definition.

Is an acute, non-suppurative, inflammation of the Kidney. Is that sub-acute variety which constitutes the more acute form of "Bright's Disease", characterized by a more or less marked beginning, scanty and highly albuminous urine, and dropsy. In its more advanced stages it is the large White Kidney of Chronic Brights Disease.

Etiology.

The disease may be acute or chronic. Some of the more common causes of the acute are, first, Sex seems to have some influence, since it is more common in males than in females, and in regard to age, youths are more frequently affected than the aged. heredity appears to exert an influence, although the facts proving this are not numerous. Type of constitution is very important among the causes, since it is found the pale, light-haired, full but flabby subjects

of the albuminous type have a special susceptibility to this form of nephritis. Also some active diu-retics, as Turpentine, copaiba, cantharides &c. causing an active hyperaemia, which if con-tinuing in action a suffi-cient time may induce an inflammation. Pregnancy is also a recognized cause, occur-ring once in one-hundred and fifty pregnancies. When it does so occur it is generally in primipara, and more com-mon in twin pregnancies. having occurred once it may happen again, and not un-

-frequently into a permanent malady, continuing indefinitely of gestation. Why this form of the disease should occur during pregnancy is not certainly known. but is probably due to a special predisposition of which pregnancy is the exciting cause. Probably among the more common exciting causes are, lying on a damp ground sitting in a cold draught during a profuse perspiration, Exposure to wet and cold, causing a sudden arrest of the skin secretion,

throwing increased action on the kidneys, causing dilitation of the uriniferous, so a hyperæmia of the organ, which if continuing any length of time soon merges into an inflammation. Scarlatina and Diphtheria are prolific causes, among some of the more chronic causes may be mentioned: anything that tends to depress the vital forces, as Syphilis, Chronic Malarial Poisoning, protracted suppuration, chronic Alcoholismus; chronic Mercurialismus, &c.

Pathology and Morbid Anatomy.

Probably the first change is a hyperaemia and enlarge-ment of the organ, due to dilitation of its arteries, the cortex being much thicken-ed, and of a white color, from over production of the renal Epithelium, lining the tubules, the pyramids and Glomeruli are much congested, the latter appear-ing as small red points on section of the organ.

these changes in the pyr-amids and Glomeruli con-trasting strongly, with the

pale opaque cortex. In consistency the Kidney is much softer than normal. On tissue breaking with a soft friable fracture, the capsule separates readily, leaving a smooth surface. The interstitial tissue is unaffected unless the inflammation continue sometime, in which case the intertubular connective-tissue will be found dotted with small round cells, which are escaped leucocytes. These may increase and become developed into a more or less fibrillated -

- tissue, the kidney now
presenting a yellowish-
- white mottled appearance,
the new inter-tubular growth
may gradually increase,
and finally contracting
from deficient nutritive sup-
- ply, will cause irregular
atrophy of the organ, as
occurs in the true chronic
interstitial form. The
changes in the tubal-
- Epithelium are insignif-
- icant, as furnishing the
chief diagnostic signs
of this form of the
disease. Among the pri-

-many changes are, first, the Epithelial cells lining the tubules become swollen and granular, due to albuminous changes, producing the condition known as "Cloudy swelling", the granules being un-affected by application of acetic acid, thus differing from nucleoli. Many small cells are also seen in the tubes, which are partly a result of proliferation of the tubal-Epithelium, but the majority are probably

Escaped leucocytes from the neighboring vessels, in addition to these cell forms, the tubes contain Hyaline or Waxy cylinders; which appearing in the urine constitute the Hyaline or Waxy casts; they are formed by a coagulation of fibrine which has escaped from the blood; they are small transparent bodies, containing neither fat, epithelium, or granules, but only the outlines by which they can be re-

-cornified. Epithelial
Casts, are portions of
the lining membrane
of the tubules, detached
in coherent pieces. if
the tubule has undergone fatty degeneration,
these casts will be found
studded with minute
globules of oil, constituting the fatty casts.
where the oil is in
minute sub-division,
the cast will present
a fine granular appearance, constituting
the fine granular casts.

may have thus caused by blood-corpuscles, constituting the "granular blood casts." The last are more commonly found in the most acute forms of the disease, and are due to a rupture of some of the congested capillaries, then again the granules in the cast may be larger, constituting the "coarse granular casts." These fatty changes are secondary to inflammation of the

tubules, and are not pri-
-mary, replacing the
swollen, granular, appear-
-ance of the epithelium
in the primary stages.
this fatty degeneration
proceeds, until finally
the cells are complet-
-ly destroyed. the fat
appearing as free mole-
-cules and granules
on the tube casts, corres-
-ponding to this fatty
change of the epithe-
-lium, is the appear-
-ance of the organ. the
redness diminishes

and the Malpighian Corpuscles are less prominent, the cortex has a yellowish-white appearance, with minute yellowish streaks, owing to the presence of fat in the tubes of the cortex. If this fatty change is not far advanced, it may pass off, the kidney returning to its normal condition, some of the degenerated cells being carried away in the urine, those that remain in the tube having the fat

in them partially ab-
-sorbed.

Death.

It is hard to conceive of a word more generally known, more thoroughly understood, more frequently used, so simple in definition and so unerring in its effects as the word Death. Death is small school boy when what is Death would be but passing amusement to his innocent self estimated personal attainments. To with the superficially polished student, after four long years of study, but in finishing College, would be but imitating the dignity of his library

afterwards; but to a learned to the silver haired sage, who has spent two years and to years in the persistent pursuit of scientific proofs to verify known facts, becomes a question of no trivial importance.

To the profane the signification of the expression has been perfectly apparent since the days of fratricidal Cain, but to the skilled Physiologist it is still a theme of perpetual inquiry. To the practising Physician it is a subject of great practical importance. — Yet so much as to what death is in the abstract

as to the various pathological causes and conditions concomitant therewith. It is quite patent to the learned mind as well as to the unlearned, that life gradually develops from a dormant seemingly inanimate germ, and that changes take place so gradually and so imperceptibly that the most skilled can not exactly fix the time when animal vitality begins. Scientists consider that as soon as fecundation takes place, then this vitality is produced; which is sufficiently definite for all practical

fine phrase but still doubtful with the propriety of observing. However uncertain it may be as to when life actually can be said to begin, it is perfectly clear that it does begin, and that it does end. And it is equally clear too that it must end, but as uncertain when the end can be said actually to have arrived. According to the legal acceptation of the term there are two modes of death, civil or theological and physical or practical. The former belongs for consideration to the department of

the physician exclusively, while the latter alone professionally concerns the physician. It is made an [illegible] in which physical manipulation takes place various men entertain numerous ideas. Once the prevalent idea was that in the animal nervous system was a special definitely defined centre or point found in the gray matter of the Medulla Oblongata, which is the seat of life, the destruction of which is attended with instantaneous death. This is the centre of respiration. But

not in any means the entire controller of natural existence as is very clearly proved by Mr. Flint in his work "Physiology of the Nervous System" where he treats it so superficially as to say: With our present knowledge of the properties and functions of the different tissues & organs it is unnecessary to produce arguments to show the unphilosophical character of such a proposition. That of the creative power of an unintelligent cause we can scarcely conceive such a thing as

instantaneous death of the entire mammalian body can it be assumed that any restricted portion of the nervous system is the sole seat of the vital point. We assert that frogs will live for weeks and even months for months after destruction of the Medulla Oblongata, and that in mammals by keeping up artificial respiration we can prolong many of the most important functions, as the action of the heart for hours after decapitation, which, I think, is sufficiently

conclusion to convince the liberal thinker beyond a doubt there can be no shadow of doubt as to the fallacy of the so called theory. The idea of instantaneous death is probably nearest fulfilled when a powerful electric discharge passes through the entire central spinal axis, but even then it is by no means certain that some parts do not for a time retain their so called vital properties. In apparent death the nerves and the heart may be shown to retain their characteristic properties;

the muscles will at least under-
stimulation and will after-
friale O x gen supply off con-
vonia Ved, or in other under-
circumstances, the glands may be
made to secrete; but who under
these circumstances would ven-
ture to say the entire organ-
ism is dead? We hardly know
of such thing as death, since
in the various tissues and organs
which go to make the entire
body become so altered as to
lose their physiological properties
beyond the possibility
of restoration; and this never
occurs for all parts of the

organism in an infant.
A person drowned may be
all appearances dead & would
certainly die without measures
for restoration; yet in such
instances restoration may be
accomplished the period of ap-
parent death being simply a
blank, as far as the recollec-
tion of the individual is
concerned; yet it would have
been equally as impossible to
tell just the point beyond
which restoration would
have been impossible as to
fix the moment when the or-
ganism became a living being.

Death is nothing more than permanent destruction of the so called vital physiological properties; and this occurs successively at different periods for different tissues and organs. It was taught by Bichat that death may take place in one of three centres, viz., the head, the lungs or the heart. And again according to the force of the Christian death is produced (1st) by failure of nutrition; (2nd) by failure of the circulation; (3rd) by failure of the emunctories to effect the elimination of effete

and poisonous matters; and (4th) in failure of the nervous system to perform its proper functions. Now it is quite clear that death may begin in the atria mortis of Bichat but certainly not limited to these confines as was once accepted & believed. It is quite reasonable to the current observer to accept the classifications of Bichat, but when we look a little more into the ultimate developments in the progress of these prevailing causes we are constrained to modify the classification.

of a relapse for a moment
pictures of retention, which may
depend on the lack of food,
disease of the alimentary canal,
the presence of diabetes or of
malignant tumors. The result
of which in either case mani-
fests itself in the malnutri-
tious condition of the blood,
which if pushed far enough
must necessarily entirely
stop the circulation.
Death from elimination;
under this head must be inclu-
ded all the effete matter, which
accumulates in the course of the
disintegrating & secretory processes

which are always going on in the normal frame. The first of these in importance is the formation of Carbonic Acid which normally is eliminated by the lungs; urea with other nitrogenous matters, which are eliminated by the kidneys, and some of the constituents of the bile, which are formed in the liver and under unfavorable circumstances absorbed into the circulation. Here it is that the work of destruction takes hold on the vital principle strength the poisonous condition of the

blood, sometimes ending in sudden asphyxia, the pathology, of which, is that during the condition the non-aerated blood impeded in its transit through the small pulmonic arteries and capillaries and through the corresponding systemic vessels, which continue to get nearer & nearer to complete obstruction, admitting less & less blood into the left side of the heart, sending less & less through the arteries; but all the while accumulating in the pulmonic circulation, right side

of the heart, systemic veins and capillaries; gradually increasing until the last faint of life ebbs away & the heart suspends its beats forever. And again these symptoms come on more slowly but essentially the same during the progress of some of the more chronic diseases.
Under the failure of the nervous system the whole or predominating cause is to be traced to the unhealthy condition of the blood by carbonic acid poisoning.
In fact it is not the brain

and spinal cord to the sympathetic system of nerves which has the direct control over the functions, the aggregate of which constitutes life. It is this which holds within its grasp the whole of the circulatory system, the excretory, and nutritive processes, and even the functions of the brain itself. It is this system therefore, that we should refer to when wishing to speak of death beginning in the nervous centre. We have now lent a sympathetic thought to each of the various

prevalent theories, and more finally to conclude notwithstanding the opinions of our ancestors to the contrary, that the great source and centre to which we may refer as the parts of death is found in the circulatory system. This important system is composed of an automatic machine, the heart, with its efferent communicators, the arteries, and afferent appendages, the veins, with an intermediate apparatus under the well known title of the capillary system.

In order that this complicated machinery may perform its physiological functions two things are necessary; (1st) throughout all parts of the body there must be a constant flow of blood of a certain rapidity; (2nd) this flow must be susceptible to both general and local modifications. It is now a well established fact, that with the changes of circumstances in any tissue or organ a like change of the blood supply is demanded; these demands are responded to on the one hand by the

mechanical and physical properties of the vascular mechanism and on the other by the nervous system. The special nerves which sway this influence are the Pneumogastric, a division of the eighth cranial nerve having its origin in a gray nucleus near the lower part of the floor of the fourth ventricle. It then passes out through the jugular foramen enclosed in a sheath common to itself & spinal accessory, accompanied by some ganglion, which no doubt has a special function.

It is composed of both motor and sensitive filaments, supplying each to the organs of voice and respiration; and motor influences to the pharynx, oesophagus, stomach & heart; acting as an inhibitor to the last named organ. The various actions & influences of which would furnish rich material for a scientific discourse.

And then the vasomotors which have their origin in the sympathetic, the office of which is to send influences to the arteries constricting or dilating as the

system depends on the external influences induced & conservation, on blood pressure was first made by Dr. Stephen Hale in the year seventeen hundred & thirty two. But the influence of the sympathetic system over circulation was left for verification by Claude Bernard in the year eighteen hundred & fifty two, just as the scientific sun of the nine-teenth century was coming forth with almost incomprehensible splendor. This he did by dividing the cervical

sympathetic to find that it was followed by a rise of temperature and dilation of the blood vessels of the same side of the head. Brown Sequard in the same year found that stimulation to the peripheral portion brought a return of pulse and a reduction of temperature. This was the birthday and cradle of the alphabet to the great vasomotor function: a subject which still presents harvest fields fertile with instruction — I thus unhamming wielded the scythe

investigation. Finally I have noticed a few of the signs of mental death, the only unmistakable evidence, of which, in beginning decomposition, first observed in the indentation of the cornea. However lightly it may have seemed to that the subjective only had reference to that death which destroys the body; and would not venture to dilate upon the death that may follow, more than under all circumstances to remember

Leaves have their time to fall,
And flowers to wither at the
north-wind's breath,
And stars to set — but all,
Thou hast all seasons for
thine own, O Death!

Jan. 2, 1853. G. T. Stikes.

Maryland University
Baltimore
Maryland